

Health Care Workforce Leadership Council

Final Report

Prepared for the

Joint Standing Committee

on

Health and Human Services

121st Maine Legislature

October 2004



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October 29, 2004

The Honorable Michael F. Brennan, Senate Chair
The Honorable Thomas J. Kane, House Chair
Joint Standing Committee on Health and Human Services
100 State House Station
Augusta, ME 04330-0100

Dear Senator Brennan, Representative Kane, and Committee Members,

On behalf of the members of the Health Care Workforce Leadership Council, I am submitting to you the final report of the Council as required by enabling legislation. As indicated in our interim report, we believe strongly that the recommendations to establish a consistent, ongoing mechanism to monitor health care workforce supply and demand data and their implications is essential to the kind of planning and informed decision-making envisioned by the legislation. Without credible information and a leadership group invested in analyzing that information for the benefit of the health care system in Maine, the Council believes that addressing the State's needs for a knowledgeable and skilled workforce in health care will continue to be limited by a lack of focus.

Consistent with this direction, the Council is also recommending that the Health Workforce Forum be empowered and supported to do the work the Council recommends. The Forum is an existing entity within the Department of Human Services' Bureau of Health and is currently authorized to work with issues very close to the goals of the Council. To that end, Council members are in the process of seeking support to introduce legislation to clarify the Forum's statutory charge to reflect the recommendations of the Council and to provide financial support to execute that charge on an ongoing basis. In addition, the Council has suggested using existing agencies and sources of information in its other recommendations wherever they can achieve the goals of the recommendations to avoid duplication of costs.

When you have reviewed the report, the other Council members and I look forward to meeting with the Committee to discuss our recommendations.

Sincerely yours,

Margaret G. Pinkham
Council Chair and
President/CEO
St. Andrews Hospital & Healthcare

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Executive Summary

The health care workforce in Maine is a critical part of the health care system. That system is, in turn, a critical element of our economy and social structure. Many committees and reports over the past few years have heralded the problems of not having an adequate supply of skilled workers to meet the growing demands for accessible health care now and in the future. The Health Care Workforce Leadership Council reviewed its charge and the current situation in Maine regarding the health care workforce. The Council determined that without focused, targeted actions aimed at obtaining and analyzing consistently available information on the workforce and related trends, Maine will continue to lack a common language to discuss these issues thoroughly and to know what actions are needed to address them.

An important part of any suggestion for change is a conviction that the recommendations have a compelling, positive impact on a widely beneficial outcome and provide value for the investment made. *The Council believes the actions below can have a lasting impact on our understanding of the essential trends related to the largest non-governmental employment sector of the State's economy and will fuel the decisions we must make going forward.*

The data defined and reported on through these recommendations will inform those in the State connected to the health care system about the trends in its demand; the capacities and limitations in supply and the opportunities this presents to people making career choices; and the priorities for training and education resources, both for employers and public policy leaders. Members of the Council expressed their belief that implementing the recommendations in this report can help students make career decisions that will keep them in Maine and at the same time help the health care industry enhance its planning and decision-making, particularly about investments in education and training. In summary, the Council believes that better informed decision-making by a wide range of participants in and leaders of the health care industry is the ultimate benefit of these actions.

The Council makes three recommendations and supports them with detailed action steps found later in this report.

COUNCIL RECOMMENDATIONS

Recommendation 1:

Provide ongoing leadership to assess and address the issues related to the adequate supply of a skilled health care workforce through the Health Workforce Forum, an ongoing partnership of health professionals, employers, professional licensing boards, educators in health occupations, and the Department of Labor.

This recommendation revitalizes and funds the existing Health Workforce Forum as the successor to the Council and ensures ready access to the information defined in the other recommendations.

Recommendation 2:

Collect ongoing data on demand for and supply of health care workers in Maine.

Actions under this recommendation include obtaining information on projected employment demand, on the existing supply of people licensed, registered, or certified in health care occupations, and on the graduates of and students enrolled in health care programs in public and private higher education institutions in the State. All data will be collected by existing State organizations.

Recommendation 3:

Report annually to the Health Workforce Forum the analysis of this demand and supply data for use in making policy recommendations on health care workforce issues in Maine.

Actions for this recommendation address the analysis and reporting of the information obtained in Recommendation 2.

Methodology and Limitations

Methodology

In 2001, a group was formed by interested members of the health care industry, including employers and professional organizations, public and private higher education institutions offering health care programs, and legislators to discuss their serious concerns about shortages in the health care workforce. That group, called The Committee to Address the Health Care Skilled Worker Shortage, presented a series of recommendations to the Governor and Legislative Leadership in an October 2001 report entitled **Maine's Health Care Skilled Worker Shortage: A Call to Action**. (See Appendix A.) One of the recommendations of that Committee was to create a Health Care Workforce Leadership Council to continue to collect information about the health care workforce and oversee the implementation of the remainder of the report's recommendations. The Council was created by Resolve of the Second Regular Session of the 120th Maine Legislature (a copy of the Resolve is attached in Appendix B).

The Council was required to submit an interim report to the Legislature by November 1, 2003 (which is included in Appendix C), and this final report by November 3, 2004. Appointments were made to the Council by the Governor, President of the Maine Senate, and Speaker of the Maine House of Representatives and included broad representation of health care employers, labor unions representing health care workers, professional organizations representing skilled health care workers, and public and private post-secondary educational institutions that offer training for skilled health care workers. The Council was convened for the first time on September 17, 2003. The Council was established by the resolve to:

- "...provide input on all policy initiatives, laws and rules concerning the skilled health care workforce to the Commissioner of Human Services, the Commissioner of Labor and the Department of Human Services, Bureau of Medical Services...with the goal of ensuring an adequate supply of skilled workers [other than physicians]" to a wide variety of health care facilities and institutions in the state, and
- report to the Legislature on the "work of the council, the potential role and need for a permanent health care workforce council or center, and any initiatives, laws or rules pertaining to the skilled health care workforce" on which input had been provided.

The Council met six times between September and November of 2003 and monthly thereafter, with one exception. The Council agreed at the beginning of its work to reach decisions by consensus. Members acted as subcommittees on specific aspects of the Council's work between meetings. In reaching its recommendations, the Council used subcommittee results, the October 2001 report, the information provided in presentations to the Council by representatives of the Departments of Human Services, Labor, the Maine Jobs Council, the National Conference of State Legislatures' Director for the Center for Primary Care and Workforce Analysis, the Maine Area Health Education Center (AHEC), and the considerable expertise and judgment of Council members.

Since the Council was created as a result of the recommendations of the Committee to Address the Health Care Skilled Worker Shortage, one of its first steps was to review the

recommendations from the Committee's report to determine if there had been significant changes since the report in either the situation to be addressed or the action steps recommended. It was the conclusion of the Council after its review that the 2001 Report still accurately represented the situation of the health care workforce in Maine. As a result, the Council refers the reader to the section in the report in Appendix A entitled "Health Care in Maine: Situation Overview" as background for this report. Members also agreed that the recommendations of the 2001 Report are, unfortunately, still appropriate today. As a result, given the change in Maine's fiscal position since the report and the prominence of other health care initiatives such as Dirigo Health, the Council believed it would be more effective if it focused its efforts on a limited number of fundamental issues requiring additional action to serve the goal and purpose of the resolve.

Finally, the Council Chair met with the Commissioner of Health and Human Services and with representatives of the Commissioner of Labor to review the work of the Council and its recommendations.

Limitations

- Council members determined that they could best fulfill their responsibilities by concentrating on recommending a sound data collection and analysis framework and a mechanism for communicating and using its results as a cornerstone for addressing effectively the charge of the resolve. The fact that other issues relevant to the health care workforce were not explored in the same depth is not a judgment on their importance, but a function of the time available to the Council and the approach chosen.
- The data collection effort recommended in the report is designed to provide information on the demand for and supply of workers in health care occupations and concentrates on those for which licensing, registration, or certification is required. That there is an existing infrastructure which can be augmented to collect the additional information reinforced the Council's choice of occupations identified for data collection. Other occupations could be added in the future as resources allow.
- While this report provides substantial guidance on the process needed to accomplish the actions recommended, further detailed planning will be required to fully implement them.
- Investments required to implement the recommendations contained in this report will be requested from the Legislature since other sources of funds were not identified during the Council's work.
- The recommendations will provide a foundation for data collection and analysis to support planning and decision-making for the health care workforce in Maine. The analysis will, no doubt, lead to the need for more research. While that need cannot be defined at this time, it may be addressed through partnerships with interested parties within the industry and government, such as the Maine Department of Labor.

Health Care Workforce in Maine: Current Highlights

In 2001, an overview of the situation of health care in Maine was provided in **Maine's Health Care Skilled Worker Shortage: A Call to Action**. The situation described persists today—the need for health care services will continue to grow in Maine because of our demographic realities, the growth of health care employment demands will continue to outstrip other employment sectors, and the importance of health care as a public policy issue will continue to challenge Maine's leaders for creative solutions.

We know the facts too well. Maine's rate of population has been growing more slowly than the nation as a whole and it is aging more rapidly. In addition, according to Maine's State Health Plan, the State has "high rates of largely preventable chronic illnesses," specifically cardiovascular disease, diabetes, chronic lung disease, and cancer, which require medical care. These facts contribute to current projections that health services will be the largest employment sector in the state by 2010 (it was second in 2000) with the largest projected gain in jobs during the period (12,761) and a 22 percent growth rate in the number of jobs. The future of the Maine economy, therefore, is dependent on a vibrant health care workforce.

Many of the occupations comprising these growth numbers are also those in which we have shortages today, the most visible of which has been nursing. Like the rest of the U.S., Maine is experiencing a nursing shortage which will continue to grow during the current and next decade. By 2020, the nursing *shortage* for the nation as a whole is expected to grow by 29 percent, or over 800,000 nurses, while in Maine the *shortage* is expected to grow by 31 percent, over 5,200 nurses. There are many efforts underway to increase the supply of new workers coming into nursing with displaced workers and mid-life career-changers as well as young adults, though the shortage of spaces in higher education programs continues to be a deterrent to meeting demand.

Various groups have issued reports on the critical workforce situation in health care facing our State and nation since **A Call to Action** was published in 2001. Two of the themes that emerge consistently from these various sources are:

- The need for consistent, reliable workforce data and analysis to accurately reflect demand and supply for health care occupations to allow for adequate planning.
- The need for ongoing collaboration among the parties involved in health care delivery, policy, and education to address the workforce needs of the health care system.

These themes are contained in two of the six recommendations of **In Our Hands**, the American Hospital Association's Commission on Workforce for Hospitals and Health Systems' comprehensive plan issued in 2002 to address workforce needs in U.S. hospitals. **The Health Care Workforce: Education Practice & Policy**, the 2002 report of the Bureau of Health Professions of HRSA (Health Resources Services Administration of the U.S. Department of Health and Human Services) cited an effort made in 2001 by the Maine Hospital Association and other groups to create in law a statewide data base with analysis of the health care workforce as a more economical way to begin to address workforce needs in Maine. Tim Henderson, Director of the Center for Primary Care of Workforce Analysis of the National Conference of State

Legislatures, in presenting to the Council on “State Initiatives to Address Nurse Shortages,” emphasized that the new thinking in some states included expanding their data collection, analysis, and communication efforts, and facilitating stakeholder partnerships and the innovative pilot projects that emerge from them.

Recent Maine reports highlight these themes as well. The preliminary report of the Maine Health Care Performance Council, **How Well Is It Working?** (2003) notes the “clear need for improved data collection efforts in Maine” and suggests ongoing participation by various constituents in the health care system. And the report to the Legislature earlier this year by the OMNE Task Force, **2003 Overview of Maine’s Nursing Graduate Capacity**, has as its first recommendation the ongoing collection and analysis of data on the nursing workforce in the State.

As these reports have made clear and the Council has concluded, data must be available from the perspectives of both the employers’ demand for workers—which is driven by factors including demographics, technology and dynamic changes in the industry—and the supply of new and existing workers to meet that demand. Currently, consistent and reliable data do not exist to determine how many qualified workers in needed healthcare occupations are licensed and working in healthcare or have chosen not to work in healthcare. Nor are the data on how many students are graduating from Maine’s educational institutions prepared to work in various health occupations collected and analyzed. Both these data sets must be analyzed in concert with data on the demand for health care workers to provide the comprehensive picture of the current and future healthcare workforce needed for effective planning and decision-making.

In summary, the urgent issues concerning the health care workforce are well-known at this point, yet resolving them requires a large-scale effort and a comparable investment that has not materialized since 2001 and is unlikely at this time. A skilled workforce is an essential part of a stable health care system, which is in turn an important element of a successful economy and social environment. These workforce issues cannot be ignored, but progress can be made with targeted actions. This has been proven many times over since the 2001 report through local partnerships that have provided scholarships, funded joint ventures on workforce issues, and used hospital facilities as lab space for education and training programs. It is on such actions—and a relatively modest financial commitment—that the Council concentrated its effort.

Notes for this section can be found on page 12.

RECOMMENDATIONS FOR ACTION

After the Council reviewed *A Call to Action* (see Appendix A) and spoke with representatives of the Departments of Labor and Health and Human Services and the Maine Jobs Council, members chose three recommendations to fulfill its charge:

- Provide ongoing leadership to assess and address the issues related to the adequate supply of a skilled health care workforce through the Health Workforce Forum, an ongoing partnership of health professionals, employers, licensing boards, health educators and the Department of Labor.
- Collect ongoing data on demand for and supply of health care workers in Maine. (This is Recommendation 6 from the 2001 report.)
- Provide a report annually analyzing this demand and supply data for use in making policy recommendations on health care workforce issues in Maine.

The first recommendation addresses specifically the question of whether there should be a successor group to this Council. The Council concluded that a successor group is needed and searched for an existing group that would be both willing to accept the responsibility and appropriate for this charge, while agreeing to recommend a new group if that was necessary. In its attempt to find existing organizations that could provide services related to the data recommendation and/or might act as the successor group, the Council had discussions with the Departments of Human Services and Labor, the Bureau of Health, the Maine Jobs Council, the Maine Hospital Association, the Maine Health Information Center, the Finance Authority of Maine, the University of Southern Maine's Muskie School of Public Service, the Maine Area Health Education Center (AHEC), the Maine Health Data Organization, and Dirigo Health about their interest in taking on the ongoing responsibility as the overarching successor entity.

While all agreed with the value of having an entity focused on this issue, some organizations concluded that what the Council envisioned was not appropriate for them. All indicated, however, that taking on this additional responsibility would necessitate additional funding.

The Council was gratified to find that an entity already exists in statute—the Health Workforce Forum, within the Department of Health and Human Services' Bureau of Health—with responsibilities similar to those the Council believes are necessary. The recommendation made in this report reflects the Council's judgment that the intent of the resolve and the actions recommended here can best be accomplished by reasserting the authority of this Forum by modifying its statutory charge to include the full scope of the Council's intent (a draft of revised language is included in Appendix D). The Forum was created in 1995. To date, its responsibilities have been addressed during workforce issues sessions of the annual meetings of the Maine Rural Health Association. The Council believes that with additional resources and clarified responsibilities, the Forum can meet the intent of the resolve and provide necessary ongoing leadership on this important issue for Maine.

The second two recommendations concentrate on identifiable, manageable, relatively economical steps for data collection, analysis, and its systematic review and use. These

recommendations form a cornerstone in achieving certain of the other recommendations in the 2001 report and the goal stated in the resolve that created the Council. As the Council discussed approaches to fulfilling its charge, all discussions seemed to lead back to the need for reliable and consistent data from a sufficient range of health care occupations that would result in meaningful analysis and a credible basis for future action. The Council highlighted this need as a central concern in its interim report in October 2003.

The Council agreed that the problems in maintaining an adequate and skilled health care workforce have been well-documented and the actions required to address many of the related challenges have been clearly articulated. Without the information and analysis recommended here, Council members believe it will be difficult to take the next steps toward understanding and shaping a health care workforce that can serve Maine's future needs. Further, without the appropriate data and analysis, "input on...policy initiatives, laws and rules" will be impossible to formulate with any credibility, as the Council found in trying to address this part of its charge.

RECOMMENDATION – 1

Provide ongoing leadership to assess and address the issues related to the adequate supply of a skilled health care workforce through the Health Workforce Forum, an ongoing partnership of health professionals, employers, licensing boards, health educators and the Department of Labor.

Action 1: Revise the current statutory language related to the Health Workforce Forum as recommended in this report to implement the recommendations of this Council.

Responsible entity: Health Care Workforce Leadership Council
Investment: No additional cost at this time

Action 2: Enact revised statutory language and provide funding for staffing and support for the Forum to assure continuity of information and action in compliance with statutory responsibilities. The funding will be ongoing.

Responsible entity: Legislature
Investment: \$18,600 annual operating cost

RECOMMENDATION – 2

Collect ongoing data on demand for and supply of health care workers in Maine.

Action 1: Obtain annual reports on current and projected demand for new and replacement employment in those health care occupations specified in Appendix E. Employer demand data is available from the Maine Department of Labor's existing data files, recognized as a primary source of information used in assessing demand and employment trends. This data is based on projected trends and may not always reflect the current, dynamic needs in the workplace or emerging occupational titles. The Department of Labor has indicated its interest in working with

the Forum to define further data collection and analysis projects that might support the work of the Forum going forward.

Responsible entity: Maine Department of Labor
Investment: No additional cost at this time

Action 2: Professional Boards responsible for licensing, registering or certifying identified health care occupations in collaboration with the Department of Human Services' Office of Health Data and Program Management's Office of Data, Research, and Vital Statistics (hereafter, Office of data, Research, and Vital Statistics) will assist in assessing the supply of existing workers. They will request the following information bi-annually from those licensed, registered and certified individuals at licensing/renewal (approximately half of the occupations renew licenses each year) to determine the employment status of licensees, whether they work in a health care occupation or another occupation, and why:

- (1) Home zip code;
- (2) Business zip code;
- (3) Birth year;
- (4) Gender;
- (5) Race;
- (6) Current employment status (employed in health care field, employed in another field, seeking health care employment, temporarily not working and not seeking work, retired or no plan to return to work, other please specify);
- (7) Practice setting (such as hospital, private practice, community clinic, nursing home, academic, government, other institution [specify];
- (8) Field of licensure/registration/certification
- (9) Specialty credential(s), if any
- (10) Whether the licensee plans to be working in health care five years from now;
- (11) Basic and advanced education (degree earned and state);
- (12) Hours per week working primary position (hours hired per week, average hours worked per week, preferred number of hours per week, and number of hours providing direct care);
- (13) In addition to the licensee's primary position, number of hours worked per week for other health care employers;
- (14) If not currently working in health care, is it because of wages/benefits, physical demands, retired, time schedules, family responsibilities, unable to find position desired, pursuing education opportunities, pursuing other career opportunity, or other (please specify).

While the cost estimates below reflect the current paper-based process for collection of this information, the Council urges the licensing boards to automate collection of the data as soon as possible to provide easier and less costly processing and access. Worth exploring is the State's **AutoForms** software available at no cost to format surveys and collect data. The Council also urges the licensing boards to promote to their licensees the value of responding to the survey.

Responsible entity: -Office of Data, Research, and Vital Statistics for occupations specified in Appendix E and
-Legislature (for funding)

Investment: \$16,700 start-up cost
\$45,400 annual operating cost

Action 3: Obtain the incremental information deemed to be necessary for comparable analysis of data on physicians, dentists and dental hygienists as part of the existing data collection effort on these occupations

Responsible entity: Office of Data, Research, and Vital Statistics in collaboration with the Licensing Boards for allopathic and osteopathic physicians, dentists and dental hygienists

Investment: No additional cost anticipated at this time

Action 4: Obtain current information on enrollment and the number of graduates in the specified health occupations from all public and private higher education institutions in Maine annually as an indicator of the supply of new workers available for employment. This data will be collected by the staff supporting the Health Workforce Forum (see Recommendation 1, Action 2), so the cost below is for non-staff costs related to the data collection effort.

Responsible entity: -Health Workforce Forum
-Legislature (for funding)

Investment: \$1,000 annual operating cost

RECOMMENDATION – 3

Report annually to the Health Workforce Forum on the analysis of this demand and supply data for use in making policy recommendations on health care workforce issues in Maine.

Action 1: Complete an analysis annually of the supply data received from surveys distributed by the licensing boards to members of licensed, registered and certified health care occupations to be used in a comprehensive report to the Health Workforce Forum.

Responsible entity: -Department of Human Services' Office of Health Data and Program Management's Office of Data, Research, and Vital Statistics
-Legislature (for funding)

Investment: \$14,600 start-up cost
\$10,000 annual operating cost

Action 2: Provide a report annually to the Department of Health and Human Services, and available to others with interest in the health care workforce, that presents an analysis of trends and the current outlook in employment demand and supply included in the data sources described under Recommendation 2 and their implications on the industry and the State. In addition, provide any appropriate recommendations to address these implications.

Responsible entity: -Health Workforce Forum
-Legislature (for funding)

Investment: \$9,900 annual operating cost

TOTAL INVESTMENT: \$31,300 START-UP COST*

\$84,900 ANNUAL OPERATING COST

*Start-up costs will be required only in Year 1 to establish the systems to support ongoing operations. Annual operating costs will be incurred from Year 1 forward.

NOTES

Health Care Workforce in Maine: Current Highlights

1. "Maine's State Health Plan." Governor's Office of Health Policy & Finance. July 23, 2004.
2. Maine QuickFacts from the US Census Bureau [online]. Available: <http://quickfacts.census.gov/qfd/states/23000.html> [2004, August 18].
3. "Employment Change in Maine." Maine Department of Labor, Labor Market Information Services. December 2002.
4. "Maine Employment Outlook 2000 to 2010." Maine Department of Labor, Labor Market Information Services. June 2003.
5. "Studying for a brighter future." Kennebec Journal. April 1, 2004, p. 1.
6. "Nursing students waiting for space." Portland Press Herald. March 21, 2004, p. 1.
7. "In Our Hands: How Hospital Leaders Can Build a Thriving Workforce." AHA Commission on Workforce for Hospitals and Health Systems. American Hospital Association. April 2002, pp. 59 and 79.
8. "The Health Care Workforce in Eight States: Education, Practice and Policy (Spring 2002)" [online]. Available: <http://bhpr.hrsa.gov/healthworkforce/reports/states02/maine.htm> [2004, August 18].
9. "State Initiatives to Address Nurse Shortages." Henderson, Tim M., National Conference of State Legislatures presentation. April 26, 2004.
10. "How Well Is It Working?: A Preliminary Report of the Maine Health Care Performance Council." Maine Development Foundation. February 2003, p. 3.
11. "2003 Overview of Maine's Nursing Graduate Capacity." Report and Recommendations of the OMNE Task Force. January 2004, p. 2.

Acknowledgements

The members of the Council agreed to contribute their time and expertise to addressing the ongoing need for skilled people to serve Maine's health care needs. They believe this issue has significant implications for the State and its citizens. Participants worked diligently to make the recommendations in this report, which they believe provide a reasonable approach to understanding the workforce needs in health care and assuring an ongoing focus on this issue. The Council members are:

Chair: Margaret G. Pinkham, President/CEO, St. Andrews Hospital & Healthcare

Council Members:

Jerry Ashlock, AFT-Maine, #16

Judy Brown, President, Local Unit 1, Maine State Nurses Association

Darlene Gover Calder, President, International Nurses Alliance

James Cassidy, President, Sisters of Charity Health System

Ralph Gabarro, CEO, Mayo Regional Hospital

Gregory Howat, Vice President, Human Resources
Eastern Maine Medical Center

Jane M. Kirschling, Dean, College of Nursing & Health Professions, University of Southern Maine

Helen Q. McKinnon, OMNE, Nursing Leaders of Maine

Patricia Philbrook, Executive Director, Maine State Nurses Association

Patricia M. Ryan, President, York County Community College

Stephen C. Shannon, Dean, College of Osteopathic Medicine & Vice President for Health Services, University of New England

Richard D. Willett, CEO, Reddington-Fairview General Hospital

Staffing for the Council was provided by the Maine Community College System

Appendixes

Maine's Health Care Skilled Worker Shortage:

A Call to Action

Report of the
Committee to Address the Health Care
Skilled Worker Shortage

October 2001

Document prepared by:

Maine Technical College System

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October 2001

The Honorable Angus S. King, Jr
Legislative Leadership, 120th Maine Legislature
Chairs of the Joint Standing Committees on Appropriations and Financial Affairs, Education and
Cultural Affairs and Health and Human Services

Dear Governor King, Leaders of the Maine Legislature and Committee Chairs:

Our Committee was created in response to the health care providers' request for help to address their urgent need for skilled workers in their workplaces across the state. The Committee believes that there are a number of factors contributing to this problem. These factors include an inadequate supply of trained health care professionals, poor retention of existing employees and the movement of many Maine citizens already trained in these fields out of the profession. In order to address these factors and capitalize on the opportunities they present, we will need to improve working conditions, address structural financial issues related to health care payment methods and assure that there is an appropriate supply of workers educated to meet the needs of the health care system now and for the future. It is this last issue, the supply of skilled workers to meet Maine's needs, that was defined as the specific, targeted scope of this Committee's recommendations.

The Committee has reached three conclusions in the past six months of work on addressing the shortage of skilled workers in the workplaces of the health care industry in Maine. First, we are well on our way to a crisis, if not already there. Second, we can only solve this problem by attracting and educating more people from within Maine to enter and then stay in health care occupations. The belief that we can compete with other states experiencing the same shortages or recruit workers from other countries to meet Maine's ongoing needs is impractical, excessively expensive and shortsighted. Third, the solutions to this problem demand a sustained collaborative effort between the health care industry and higher education, with State government and its agencies also playing a significant role. According to a recently released survey by the Maine State Chamber of Commerce and the Maine Technical College System of institutional health care providers, Maine will need at least 1,000 more nurses by the end of next year than will be graduated by its higher education institutions next year. Similarly, in eight other health professions, over 300 more skilled workers will be needed than will be graduated in the same period.

The lack of skilled workers in the workplace weakens the quality and capability of our health care system in Maine, and creates an extremely serious situation. In a recent Maine Hospital Association survey, 68 percent of responding hospitals indicated that the workforce shortage has affected access to care. Less obvious, but every bit as perilous, a weakened health care system diminishes Maine's attractiveness for economic development and our financial condition, just as a compromised transportation system or communication system would. Today, we have hundreds of vacant positions in health care careers that pay good wages and have very good prospects for the future, while many Maine people languish in low-paying jobs trying to make ends meet so they can continue to live in the state they love. Tomorrow, we must connect those careers and people.

A strong health care system is essential to maintaining the quality of life we have in Maine. Skilled workers are the heart of that system. This report shows that we are on the edge of

a crisis and serves as a call to action to all of us to prevent it. Addressing this problem now will require focused effort, cooperation, and a sustained commitment of money and attention. The consequence of not addressing it will be a price none of us is willing to pay.

We, and the other members of the Committee, urge your support of these recommendations and your active leadership in implementing them. We stand ready to assist your efforts in any way we can.

Sincerely yours,

The Honorable Michael Michaud
Senate President, 120th Maine Legislature, First Regular Session

Norman Ledwin, CEO, Eastern Maine Healthcare

Michael Tyler, CEO, Sandy River Health System

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Acknowledgements

Any complex project involves many people who contribute both directly and indirectly to its results. The shortage of health care workers is a public policy issue of such magnitude that the chance to contribute to possible solutions attracted many talented and thoughtful people from the health care industry, higher education and the public policy arena.

The Committee responsible for the recommendations in this report conducted its work on an accelerated time frame to make progress on this issue as soon as possible. They met between May and September of this year despite very demanding professional schedules. They made the completion of this report a priority and their many contributions are evident in the document. The Committee members are:

Co-Chairs: The Honorable Michael Michaud, President, Maine Senate,
120th Maine Legislature
Norman Ledwin, CEO, Eastern Maine Healthcare
Michael Tyler, CEO, Sandy River Health System

Committee Members:

Kenneth Bowden, CEO, First Atlantic Corporation
Sandra Featherman, President, University of New England and
President, Maine Independent Colleges Association
John Fitzsimmons, President, Maine Technical College System
Joanne Fortin, Director of Nursing, Northern Maine Medical
Center
Danielle Fournier, Employment Manager, Eastern Maine Medical
Center
William Gillis, Owner, Clover Health Care
Julian Haynes, Executive Director of Policy Analysis, Research,
& Public Affairs, University of Maine System
The Honorable Susan Longley, Senator, Maine Senate
Terrence MacTaggart, Chancellor, University of Maine System
Lisa McIlwain, VP Human Resources, Miles Health Care
Vernon Moore, Dean, College of Health Professions, University of
New England
Patricia Philbrook, Executive Director, Maine State Nurses
Association
Therese Shipps, Director of School of Nursing, University of
Maine
Alexander Szafran, Imaging Services Administrator, Maine
Medical Center

Staff: Jean Mattimore, Executive Director, Center for Career
Development, Maine Technical College System

The data provided to the Committee from the *Maine Healthcare Workforce Needs Survey*, the joint report of the Maine State Chamber of Commerce and the Maine Technical College System, quantified the relationship between Maine's demand for skilled workers with higher education in critical occupations and the supply of graduates in those occupations from Maine's public and private colleges and universities. This data provided a foundation for many of the recommendations in the report and we commend the Chamber's investment in obtaining this information. The full report is included in Appendix A of this report.

Finally, as an important part of its formulation of recommendations for action, the Committee authorized four focus groups held in northern, eastern, central and southern Maine to collect the input of health care professionals and educators in those local areas. Forty-nine people participated in these groups. Their ideas were used by the Committee in arriving at the recommendations presented here. The Committee expressed its appreciation for their work often in this process and does so again here. A full list of participants in the focus groups follows, and the results from each group are presented in Appendix B of this report.

NMTC - May 23, 2001

Rachel Albert
Director of Nursing
University of Maine at Fort Kent

Sandra SanAntonio
Operations Coordinator
NMMC/Valley Medical Association

Karen Boucher
Respiratory Therapist
Northern Maine Medical Center

Linda Slowik
Dir. Social Services & Case Mgmt.
Northern Maine Medical Center

Cheryl Daigle, RNC
Northern Maine Medical Center

Joan Thibodeau, Lab Manager
Northern Maine Medical Center

Kris Doody-Chabre, CEO
Cary Medical Center

EMTC - May 24, 2001
Paula Ballesteros, Patient Care Manager
Eastern Maine Medical Center

Louis Dugal, Administrator
High View Manor

Catherine Berardelli
Coordinator RN Studies
University of Maine School of Nursing

Janet Durgin, RN, CAN, LSW
MCH Director Hospice Consult

Kathie Boogaart
Director Patient Care Services
Waldo County General Hospital

Jeannine Hobbins, RN, LEN
Northern Maine Medical Center

Diane Karagory
Sr. Nursing Manager Surgical Services
The Aroostook Medical Center

Angela Hollis-Dumas
Tech Supervisor Pharmacy
Eastern Maine Medical Center

Betty Kent-Conant
Department Chair, Nursing
Northern Maine Technical College

Dana Hunter
Operations Manager, Pharmacy
Eastern Maine Medical Center

Jim Levasseur, Administrator
Forest Hill Manor

Marilyn Lavelle, Chair
Nursing Program
Eastern Maine Technical College

Roland Roy, Director of Nursing
Forest Hill Manor

Bonnie Pelissier

Program Manager, Adult Services
Acadia Hospital
Lorraine Rodgersson
Administrator of Nursing
Eastern Maine Medical Center

Erik Steele
Administrator, Family Physician
Eastern Maine Medical Center

Dianne Swandal
VP Patient Care Services
St. Joseph Hospital

CMTC - June 7, 2001
Susan Belanger
Division Leader, Acute Care Services
Sister of Charity Health System

Liz Bennoch
Human Resources Rep.
Western Maine Health

George Hunter
VP Human Resources
Mid-Coast Hospital

Roberta Metivier
VP Human Resources
Western Maine Health

Nicole Morin-Scribner
Director Employee Relations
St. Mary's Regional Medical Center

Sallie Nealand
Coordinator, RN Education
Lewiston-Auburn College-USM

Mary Anne Ponti
VP Nursing/PCS
Penobscot Bay Medical Center

Anne Schuettinger, Chair
Nursing & Rad Tech
Central Maine Technical College

Sharron Sieleman
Director Acute Care
Central Maine Medical Center

Pat Vampatella, Academic Dean
Central Maine Technical College

Kim Waldron
Program Director, Labor Arm

Maine State Nurses Association

SMTC - June 8, 2001
Mark Cole
Supervisor, Maine Sleep Institute
Maine Medical Center

Troy Cutler, RN, Director of Nursing
Seaside Rehab/First Atlantic

Jean Dyer, Chair, Nursing Department
University of New England

Michael Harriman, RCIS
Maine Medical Center

Christopher Hirsch
Pulmonary Medicine Admin.
Respiratory Therapy
Maine Medical Center

Dee Hopper, VP Patient Care Services
Goodall Hospital

Carole Howe
Director of Nursing Services
Hawthorne House

Patricia Kay, RNC, Director of Nursing
Falmouth by the Sea

Jane Kirschling, Dean
College of Nursing & Health Professions
University of Southern Maine

Juliana L'Heureux
Executive Director, Home Health Care
Mid Coast Health Services CHANS

Sue Sepples, Assistant Prof. of Nursing
University of Southern Maine

Delia Sloan, MRI Technologist
Maine Medical Center

Nancy Smith, RN
Chairperson Nursing Dept.
Southern Maine Technical College

Linda Sturm
Director of Guidance
South Portland High School

Executive Summary

Health care providers in Maine and the nation face a number of serious issues in what may be the defining period for our future. Reimbursement mechanisms are seen as inadequate in their support for both the quantity and quality of services expected of providers. Working conditions have also become an increasingly visible barrier in the attraction and retention of skilled workers. The shortage of staff in the workplace has added to the pressure on existing workers and, when combined with the higher level of care required by today's older and often more acutely ill in-patients, has exacerbated the worker shortage due to staff turnover. The recent activation of military reserve units has the potential to remove even more staff from provider workplaces, an impact that is still to be determined.

The need for a more adequate supply of skilled workers in health care workplaces is a clear and critical issue in this current situation. This Committee has focused its effort on this specific issue and the scope of its work has been intentionally limited to that aspect of the health care providers' challenges. The Committee was created in March 2001 in response to a request for help from health care employers to the Maine Technical College System (MTCS). MTCS responded to the industry's request by proposing a partnership of leaders from health care, public and private higher education institutions and the public policy arena to create recommendations for action to address this serious situation. The Committee has met often over the last six months to discuss the recommendations included here, which are presented with the full support of all Committee members.

The shortage of skilled workers in health care workplaces is a severe problem in Maine that will become a crisis tomorrow if we do not address it in a sustained systematic way starting today.

According to a survey completed in September 2001 by the Maine State Chamber of Commerce and the Maine Technical College System, respondents from hospitals, long-term care facilities and home health care services will need 1,584 additional registered and licensed practical nurses by the end of 2002 while Maine's public and private higher education institutions will graduate only 531, leaving a projected shortage of over 1,000 nurses by the end of next year. In the same time period, over 400 additional workers will be needed in eight other health professions with only 108 graduates projected, a gap of over 300 workers.

These facts when combined with the demographic reality of our aging population and the increased demand for health care services will present a serious threat to the quality of our health care system. More than that, the situation threatens our economic stability in the same way any failure of infrastructure does...by setting a limit on growth and eroding confidence in our quality of life. This is a problem we still have the opportunity to solve, but only with concerted attention.

The Committee focused its attention on three major themes that emerged from the input of statewide focus groups; data made available from a variety of sources, in particular the Maine State Chamber of Commerce/Maine Technical College System industry/higher education survey; and the knowledge and experience of Committee members.

These themes are:

- I. Continue statewide leadership focused on resolving the health care workforce shortages as a successor to this Committee.
- II. Develop a supply of skilled health care workers that can meet Maine's needs.
- III. Promote health care occupations as attractive careers.

These themes led to specific recommendations and action steps. The recommendations are listed below and appear again with detailed action steps and cost estimates beginning on page 21.

COMMITTEE RECOMMENDATIONS

I. Continue statewide leadership focused on resolving the health care workforce shortages as a successor to this Committee.

Recommendation 1:

Provide ongoing leadership to address the shortage of skilled health care workers and advocacy for this issue through a statewide partnership among health care employers, public and private higher education institutions and public policy leaders in Maine.

II. Develop a supply of skilled health care workers that can meet Maine's needs.

Recommendation 2:

Expand capacity of existing health care programs and/or create new programs in higher education to achieve the goal of graduating enough students to meet 85% of Maine employers' demand.

Recommendation 3:

Provide additional financial support to recruit more students into health care fields and to encourage existing health care professionals to teach in higher education.

Recommendation 4:

Increase the ease of participation in higher education to prepare people for health care careers.

Recommendation 5:

Establish more effective partnerships between higher education institutions and health care providers, leading to greater opportunity for students to work within the health care field while pursuing their chosen program of study and improve integration of employer and higher education roles.

Recommendation 6:

Maintain current data on demand for and supply of health care workers in Maine.

III. Promote health care occupations as attractive careers.

Recommendation 7:

Create a communication plan to reach target audiences to build awareness of health care careers and promote them as positive career choices to potential workers.

The total investment requested to implement these recommendations is \$4,500,000, of which \$4,000,000 is annual, ongoing funding, and \$500,000 is one-time funding. Recommendation 4 accounts for \$3,000,000 of this amount and would enroll 500 new students in new and expanded health care programs in the first year of funding alone. (Most of those students would require two or more years to complete their programs.)

A strong health care system is essential to maintaining the quality of life we have in Maine. Skilled workers are the heart of that system. This report shows that we are on the edge of a crisis and serves as a call to action to all of us to prevent it.

Methodology and Limitations

Methodology

The Committee to Address the Health Care Skilled Worker Shortage was created in March 2001 to develop an action plan to address this issue within the health care industry. The creation of the Committee was the result of a meeting on March 26, 2001 among leaders in the industry, higher education and the public policy arena to determine a course of action for Maine. The list of attendees of this initial meeting is included in Appendix C.

Three co-chairs of the committee were named, each of whom appointed three members to the committee who could represent a variety of perspectives on the problem and who represented a broad statewide geographic distribution. In addition, the President of the Maine Technical College System, the Chancellor of the University of Maine System and the President of the Maine Independent Colleges Association agreed to join the Committee, the last two including designees in the Committee's work as well.

The Committee decided at its first meeting in early May to conduct four focus groups in different regions of the state in May and June. These focus groups created lists of ideas for action to be considered by the Committee in creating its recommendations. Representatives of the health care industry, education and the Legislature were invited to focus groups held at Northern Maine Technical College in Presque Isle, Eastern Maine Technical College in Bangor, Central Maine Technical College in Auburn and Southern Maine Technical College in South Portland. A list of the results of the four focus groups is included in Appendix C. Once the Committee had discussed the work of the focus groups, the major themes and all of the information recorded from all four groups was sent to focus group attendees for any additional comment.

The Committee met monthly through September, with sub-committees working on specific recommendations meeting in between. Members used the results of the focus groups, the data from the Maine State Chamber of Commerce/Maine Technical College System report, *Maine Health Care Workforce Needs Survey: Maine's Hospitals, Long-Term Care Facilities, & Home Healthcare Services*, as well as the knowledge and experience of Committee members and other resources, to determine the recommendations for action found in this report. The Committee agreed at the beginning of its work that it would reach consensus on all final recommendations, so this report is presented with the full support of all Committee members.

Limitations

- The representatives of the industry, higher education and public policy who collaborated in the creation of this Committee defined its purpose very specifically so that the Committee could focus on the development of recommendations within a relatively short timeframe. The Committee's purpose was to create strategies for action to increase the number of skilled workers in Maine to address the critical current and projected shortages in this industry. The scope of review encompassed those health care occupations that require college education, including one-year certificates and two- or four-year degrees.

- There are important issues affecting health care in Maine that fall outside the scope of this report and so were not addressed by the Committee, such as working conditions and the structure of the reimbursement system. The fact that these issues are not addressed is not a judgment on their significance or indication that they are not important issues that should be addressed. Rather, it is an intentional limitation of the scope of this project.
- The data used by the Committee and presented in this report were gathered from focus groups, from the expertise of committee members and from the *Maine Healthcare Workforce Needs Survey*. The data from the *Needs Survey* are subject to the limitations defined in that document, which is found in full in Appendix A. In addition, vacancies at one health care provider may be filled by staff from another health care provider which may affect the total net employer vacancies to a degree that cannot be specified from the survey data. The data in this report are not designed to produce results that are subjected to measurements for statistical significance.
- A number of recommendations in this report call for additional research before the recommended action can occur. Further research will likely be needed as the situation for skilled workers in health care evolves.

Health Care in Maine: Situation Overview

The health care system in Maine is facing challenges on a number of fronts. The financing of the industry through Medicare and Medicaid reimbursement systems is complex and must adapt to new demands by health care providers faced with the demographic realities of an aging population and the fiscal realities of that population's need for higher levels of care. In addition, ever-changing technologies and their related costs must also be incorporated into these institutions.

One element of health care's challenge that appears to be felt consistently across all sectors of the industry is the need for more skilled health care workers in the industry's workplaces. Working conditions, exacerbated by unfilled vacancies for additional workers, has surfaced as a significant issue in retaining health care workers. Attraction of new workers to the industry, both from students in the K-12 system and from the existing workforce has not kept pace with the demand in the industry. This situation overview touches on a number of these issues, however it focuses on the industry's specific circumstances related to skilled workers consistent with the purpose of this report.

Nursing shortages attract headlines, but the challenge in health care staffing today is broader than any single vocation. In a survey by the Maine Hospital Association (MHA) in a March 2001 survey nearly 60% of responding hospitals indicated that they expected radiology technicians and laboratory technicians to be among the occupations with the greatest recruitment needs.(1) In a September 2001 survey, 68% of MHA members indicated that the workforce shortage has affected access to health care.(2)

Across the nation, there are parallel needs in a range of professions and technical fields. In June, the American Hospital Association reported that hospitals had 168,000 open positions. Among the jobs with highest vacancy rates were pharmacists – 21 percent of all positions open, radiological technologists – 18 percent, and registered nurses – 11 percent.(3)

There is concern in health care that demographic trends are poised to worsen this situation. About one-third of Maine nurses are age 45 to 54, according to March 2001 MHA survey results. The federal Bureau of Labor Statistics (BLS) cites nursing among a small number of occupations that will be most affected by the exit of baby boomers from the workforce. Between 1998 and 2003, BLS estimates that the U.S. will need 143,000 new registered nurses just to stay equal to the current workforce.(4) Between 2003 and 2008, retirements accelerate and open an additional need for 188,000 nurses. The aging population also will drive demand for health care services, so the industry will need additional staff precisely when more of the current staff reach retirement.

The Skilled Worker Shortage in Health Care in Maine

Because of the gravity of the situation in Maine, the Maine State Chamber of Commerce and the Maine Technical College System surveyed hospitals, long-term care facilities and home health care service providers in Maine this summer to learn their projected vacancies in health care occupations by the end of 2002. They also surveyed all public and private higher education

institutions in the state to determine the number of students graduating from programs related to those occupations during the same period.

The survey results are consistent with the national data and show an alarming gap in a number of critical occupations between the demand for skilled workers and the anticipated supply in Maine. The table below shows the 10 occupations with the greatest workforce deficit, or the difference between employer projections of vacancies by December 31, 2002, and the projected graduates in 2002. Of these 10 occupations, 9 require one to two years of post-secondary education.(5)

HEALTH CARE INDUSTRY SURVEY RESULTS <i>Projected Workforce Demand vs. Projected Graduate Supply</i>					
Standard Occupational Classification (SOC) Position Title	Projected Workforce Vacancies Through 2002	Projected Higher Education Graduates 2002	<i>Projected Workforce Deficit</i>	Higher Education Requirement	1998 Midrange Wage*
1. Registered Nurses**	1385	516	-869	Associate/ Bachelor's Degree	\$15.50 - \$20.39
2. Licensed Practical and Vocational Nurses	199	15	-184	1 year	\$11.14 - \$13.45
3. Radiologic Technologists and Technicians	103	41	-62	Associate Degree	\$12.93 - \$16.42
4. Health Information Technicians	68	11	-57	Associate Degree	\$8.86 - \$11.85
5. Surgical Technologists	50	4	-46	1 year/Associate	\$10.79 - \$13.23
6. Pharmacy Technicians	43	0	-43	1 year/Associate	N/A
7. Medical Transcriptionists	62	26	-36	1 year	\$11.58
8. Respiratory Therapists	39	8	-31	Associate Degree	\$13.90 - \$18.03
9. Medical & Clinical Laboratory Technologists	36	5	-31	Bachelor's Degree	\$16.82
10. Medical and Clinical Laboratory Technicians	38	13	-25	Associate Degree	\$13.13

September 2001

** Wage Data Source: Maine Department of Labor*

*** Survey did not ask employers to differentiate between Associate and Bachelor's degree registered nurses*

The stark reality of these numbers is even more dramatic because of several facts. First, the employer need for staff is almost certainly higher in many of these occupations, such as nursing, since the survey included institutional settings but did not include individual doctors' offices, clinics and other health care providers. Second, not all graduates from all higher education

institutions will choose to work in Maine. It is not known whether the numbers of those who work outside Maine are offset by those who come to work in Maine in similar health care occupations. Finally, these projections are for one year. Since it takes time to increase program capacity to educate more people, each year of delay in addressing this need exacerbates the problem.

The shortages in the occupations documented above, the most dramatic of which is the shortage of over 1,000 registered and licensed practical nurses, constitutes a major public policy issue. There are several occupations listed above in which shortages exist and there is little to no program capacity in Maine to educate people for those occupations, such as pharmacist and pharmacy technician.

Additional Factors Affecting the Number of Health Care Workers

The challenge to meeting the need for skilled workers is not demographic alone. It begins with the attitudes of young people, and touches on social changes that affect the larger pool of existing workers in the labor market. Working conditions and capacity to train new people also are critical elements.

Research among school children, grades 2 to 10, reveals how potential workers of the future see health professions. As part of an initiative to encourage more candidates in nursing, a market research firm interviewed 1,800 children in 10 U.S. cities. Among some of the findings:

Students in 9th and 10th grade were not sure what training was required to become a registered nurse and did not see it as a career with opportunities for advancement. Students also were unsure of job security, felt some elements of the profession would be “scary” and saw health care, in general, as an industry in “turmoil.”

These attitudes are likely one reason that fewer students go directly from high school to a 1-year, 2-year or 4-year program in a health care field. At Sanford High School, a guidance counselor estimated that only about six students from a class of 240 plan to attend nursing programs.(6) Given that this likely includes a range of allied health fields – and that fewer than half will not complete their program of study – this is a small number on the early track to health care professions. With one in ten Maine jobs tied to health care, it is surprising that more young people are not pursuing these careers.(7) The average age of registered nurses upon graduation is 31. Many are not finding their way into the field until later in their work life.

The pipeline of potential health care professionals is influenced by social factors as well. Nursing and other health professions were once among a small number of career paths for women. The women’s movement opened new career avenues, and in the process challenged health care to find new sources of talent.

More recently, work conditions have become a critical issue in retaining health care staff, particularly in hospitals. Working conditions include the additional strain caused by inadequate staffing because of the shortage of skilled workers and put a stress on staff that is reflected in job satisfaction. A survey by The Nursing Executive Center in 1999 found that 28 percent of

registered nurses were somewhat or very dissatisfied in their jobs and 51 percent were less or much less satisfied with their jobs than they had been two years earlier.(8) Another study found that half of current registered nurses had considered leaving patient care for reasons other than retirement during the past two years.

In addition, changes in treatments, and in the way Medicare, Medicaid and private insurers reimburse for care, mean that hospitals see patients who are generally sicker than in the past. Other patients are treated on an outpatient basis or in long term care facilities, while hospitals have a concentration of patients needing acute care. In Maine, the challenge of keeping workers in the field is evident as well. The state has 22,000 registered nurses, but about 18 percent of them are working in other fields.(9)

Maine's other major challenge is in its capacity to train new health care professionals, particularly as the demographic trends that work against the health care industry become more powerful. The state is not in a situation where the number of health care workers is actually declining. Instead, it is a case where the numbers are not growing fast enough. The number completing degrees in key fields, for example, are steady but not increasing as fast as needed in occupations where employment opportunities abound and average wages are attractive. The chart below includes data supporting this point provided by Jane Kirschling, Dean of the College of Nursing at the University of Southern Maine from a survey of nursing programs in Maine conducted in Spring of 2001. The chart indicates the number of students new to the profession earning their registered nurse designation in associate and bachelor's degree programs and shows that the total number of new RN graduates has declined over the three year period.

In Maine, the desirable mix of the number of nurses with associate degrees and bachelor's degrees has not been defined. Some national data provided in the mid-1990s by the National Advisory Council on Nurse Education and the Pew Health Professions Commission supported an increased emphasis on nurses achieving bachelor's degrees.(10 and 11) Maine's higher education system is positioned well to address whatever optimal mix is defined for the state since the technical colleges' associate degree in nursing programs articulate fully with the state's public universities and private colleges.

Maine Students Completing Associate Degree in Nursing

Year	Statewide Total
-------------	------------------------

1998-1999	264
1999-2000	221
2000-2001	252

Maine Students Completing Bachelor's Degree in Nursing

Year	Statewide Total
-------------	------------------------

1998-1999	210
1999-2000	204
2000-2001	186

It seems a paradox that, although fewer high school students are pursuing health care careers, many programs within the state report greater student demand than they have capacity to serve. This is being driven in large part by people changing careers, often in mid-life, and seeing health care as a personally fulfilling choice. Southern Maine Technical College had more than 200 applicants and a waiting list of 12 this fall vying for 40 spots in its Associate Degree Nursing program. Most of the other Technical Colleges report similar capacity challenges in nursing and some other health programs.

Institutional capacity to educate new and existing workers is an additional challenge for both employers and educators. If programs expand, more professionals in these occupations will need to be encouraged and supported to pursue further education to teach in those programs. Higher education institutions will be challenged to obtain sufficient numbers of faculty and financial resources to maintain student/faculty ratios mandated by licensing bodies (for example, nursing is 8:1). Further, as a small state, Maine does not have as many clinical settings to provide the practical experiences students must have for graduation and licensure. The state's educators and health care providers will need strong cooperation both to identify priority needs and to share the human resources and clinical settings that can deliver the training.

Maine's health care worker shortage is less severe than in some states, but it has a frustrating sidelight. The health service field here provides a distinct source of quality jobs that more Maine people should be eager to tap. In fact, the state Department of Labor projects that health care service jobs will grow 23.9 percent between 1998 and 2008 compared with 10.2 percent for all jobs.

Maine has a pool of young people who can be educated for these careers. The state's high school graduation rate is among the highest in the nation, yet Maine ranks 28th nationally in students going on to college. Attracting more students into health fields would both close this educational attainment gap and move students into fields where jobs are plentiful.

Among adult students seeking a change in career, the potential appeal of health service careers is stronger than current program capacity levels. In a survey of Maine adults without college degrees, 81 percent listed better job opportunities and higher wages as the most important benefits of having a college degree. The survey, commissioned by the Maine Technical College System, was conducted by Strategic Marketing Services earlier this year.(12) The attractive wages and growth prospects within the health care industry should appeal to these potential workers. Because 3 out of 4 workers who will be in the workforce in 2006 are already working, they should also be attractive to health care employers.

Therefore, work must be done to build and integrate both the demand- and supply-side elements to form the interrelated system necessary to address this problem for the long term:

- Capacity in health care occupation programs within higher education must be expanded to produce larger numbers of trained nurses and workers in other health professions.
- Clinical sites with employers must be available to match this capacity or licensing requirements cannot be met.

- Faculty and staff must be available to teach and supervise the students.
- Individuals from the new and existing workforce must be attracted to these occupations.

In Summary

The current shortage of health care professionals results from a variety of factors. Many in the current workforce are reaching retirement age, and those numbers will only grow. The aging trend also is resulting in higher demand for health services, again certain to grow in the future in Maine. Working conditions are not sufficiently attractive to existing health care professionals and potential students. Against this backdrop, too few of Maine's young people pursue health care careers. In addition, job dissatisfaction leads some in the field away from patient care roles.

Educators and health care providers face the dual challenge of making more young people and career-changing adults aware of the opportunities in health care and assuring that they have the academic skills and support systems to succeed in these occupations. In addition, educators and industry in partnership with the State will need to increase program capacity so opportunities in fields with the greatest need are accessible.

Notes

1. "Nursing and Allied Health Professional Staff Shortages," Maine Hospital Association research presentation, March 26, 2001.
2. "Maine's Healthcare Work Force: A Special Report Examining the Implications of the Growing Labor Shortage on Access to Hospital Care," Maine Hospital Association website, http://www.themha.org/pages/new_pages/new2m.htm. September 4, 2001.
3. "American Hospital in Midst of Workforce Shortage," American Hospital Association news release, June 5, 2001.
4. "Gauging the Labor Force Effects of Retiring Baby-Boomers," Monthly Labor Review, July 2000, pp. 17-25.
5. "Maine Health Care Workforce Needs Survey: Maine's Hospitals, Long-term Care Facilities, & Home Health Care Services," Maine State Chamber of Commerce and the Maine Technical College System, September 2001, p. 3.
6. "Big Demand, Low Supply in Nursing Ranks," Journal Tribune Weekend, May 5, 2001, p. A3.
7. The Cost of Health Care in Maine, Report of the Year 2000 Blue Ribbon Commission on Health Care to Governor Angus S. King, Jr., November 2000.

8. "Nursing Workforce: Emerging Nurse Shortage Due to Multiple Factors," General Accounting Office report, July 2001, p. 8.
9. "Big Demand, Low Supply in Nursing Ranks," Journal Tribune Weekend, May 5, 2001, p. A3.
10. "Report to the Secretary of the Department of Health and Human Services on the Basic Registered Nurse Workforce," National Advisory Council on Nurse Education and Practice, October, 1996, pp. 48, 53.
11. "Critical Challenges: Revitalizing the Health Professions for the Twenty-First Century," Pew Health Professions Commission. (November 1995). University of California – San Francisco Center for Health Professions, p. 51.
12. "Report to the Maine Technical College System: Survey of Maine Citizens Who Have Not Attained a College Degree." Strategic Marketing Services, A Division of Pan Atlantic Consultants, February 2001.

RECOMMENDATIONS FOR ACTION

After discussing the ideas suggested from the focus groups, the data from the Maine State Chamber of Commerce/Maine Technical College System *Maine Health Care Workforce Needs Survey*, and other information, the Committee determined that its recommendations should encompass three major themes:

- Continue statewide leadership focused on resolving the health care workforce shortages as a successor to this Committee.
- Develop a supply of skilled health care workers that can meet Maine's needs.
- Promote health care occupations as attractive careers.

The recommendations and action steps related to these themes follow. Given the information in the situation assessment earlier in this document and the purpose of this Committee, it is not surprising that the majority of recommendations are found under the second theme. However, the Committee views the three themes as inextricably linked to the resolution of this situation, particularly since most of the actions recommended in this report require a commitment that must be sustained over an extended period of time. The Committee also suggests that other issues outside the scope of this project must be addressed as part of a comprehensive health care solution.

All recommendations and action steps are organized below under the appropriate theme. Each action step identifies the organization the Committee believes has or could assume the responsibility for that action. "Investment" for the action step is expressed in one of two ways based on the Committee's analysis at the time of this report. All dollar amounts reflect resources required from the State. "No funding requested from the State" indicates that the "responsible entity" will find a way to cover the costs from its own resources or those it will acquire for the stated purpose, in many cases through employer/industry participation.

CONTINUE STATEWIDE LEADERSHIP TO ADDRESS THE SHORTAGE

RECOMMENDATION - 1

Provide ongoing leadership to address the shortage of skilled health care workers and advocacy for this issue through a statewide partnership among health care employers, public and private higher education institutions and public policy leaders in Maine.

Action 1: Authorize a Health Care Workforce Leadership Council to oversee implementation of the recommendations in this report. The Leadership Council will coordinate with other groups exploring this issue to minimize duplication of effort and maximize successful outcomes in areas of shared interest and will explore whether this group should be independent or can merge with an existing organization to pursue these objectives.

Responsible Entity: 120th Maine Legislature
Investment: No funding requested from the State at this time

Action 2: Provide funding for staffing for the Council to assure continuity of information and action. The funding will be ongoing, even if the Council determines it should merge with another entity that will assume its responsibilities, until it is determined there is no longer a need for its existence.

Responsible Entity: 120th Maine Legislature
Investment: \$75,000 annually

DEVELOP A SUPPLY OF WORKERS THAT MEETS THE STATE'S NEEDS.

RECOMMENDATION - 2

Expand capacity of existing health care programs and/or create new programs in higher education to achieve goal of graduating enough students to meet 85% of Maine employers' demand.

Action 1: Establish an annual allocation from the Legislature to fund creation of additional sections in existing health care programs and/or new health care programs. Funds for this initiative will cover the full cost of operating the section or program for one cycle for either two-year programs or four-year programs. The State will fund fifty percent of the cost for one additional two- or four-year cycle.

The goal of this action is that public and private post-secondary institutions in Maine will produce 85% of the skilled workforce required by Maine's health care providers. The Legislature will determine which agency will be responsible for this action. Applications for program expansion or creation will be submitted to the designated agency, which will work with the Health Care Leadership Council in an advisory role to determine the distribution of funds to best achieve that objective and will invest based on a cost per student of \$6,000. Requests for funds for assistance with recruitment for difficult-to-fill occupations can also be made to the agency.

Responsible Entity: Legislature
Investment: \$3,000,000 annually

Action 2: Establish rolling academic and clinical schedules to allow more students into programs by having programs start every semester with clinical rotations to be continuous throughout the year.

Responsible Entity: Post-secondary Institutions/Health Care Providers
Investment: Included in investment for Action 1 above

Action 3: Reinstate Licensed Practical Nurse (LPN) programming at the Technical Colleges in Fall 2002 in order to increase the supply of LPNs available to work in Maine.

Responsible Entity: Maine Technical College System
Investment: Included in investment for Action 1 above

RECOMMENDATION – 3

Provide additional financial support to recruit more students into health care fields and to encourage existing health care professionals to teach in higher education.

Action 1: Establish a loan forgiveness program for full-time students who commit to work for a Maine health care provider or in programs in health care occupations offered by a higher education institution in Maine. Tuition for each year of college attended will be provided if the student agrees to work one year for each year of tuition paid. Scholarships will be awarded for up to a maximum of four years of study. All health care programs, from associate degrees through doctorate degrees are eligible.

Responsible entity: Legislature
Investment: \$500,000 annually

Action 2: Initiate legislation that directs the Maine Department of Human Services to include the costs incurred by providers, associated with programs and policies that can increase the pool of qualified health care workers in the definition of “fixed cost” or in other ways assures that providers’ costs are reimbursed fully.

Responsible Entity: Maine Health Care Association
Investment: Funding to be determined

RECOMMENDATION – 4

Increase the ease of participation in higher education to prepare people for health care careers.

Action 1: Convene a group of the transfer counselors from higher education institutions to review their certificate and undergraduate degree program offerings in health care occupations and to collaborate on articulation agreements and increase ease of transfer for students.

Responsible Entity: University of Maine System/Maine Independent College Assoc.
Investment: No funding requested from the State

Action 2: Create a web site that defines the transfer information from all public and private higher education institutions in a format that is easily accessible to students and prospective students.

Responsible Entity: Health Care Leadership Council
Investment: \$10,000 annually

Action 3: Redesign current curricula to enable non-traditional (i.e. career change) students to participate in programs during non-standard hours, and/or as part-time students. Provide services meeting their specific needs (e.g. day care, remedial work, tutoring) to support entry into and

completion of college education , including linkages with existing programs such as the Maine Education Opportunity Center at the University of Maine and the federal TRIO programs.

Responsible Entity: Post-secondary Institutions
Investment: No funding requested from the State

Action 4: Fund pilot projects in alternative delivery formats for health care programs that utilize non-traditional approaches in their delivery. Programs funded under this initiative may include but not be limited to the use of distance education methods, cooperative education, part-time scheduling, and partnerships with health care providers, etc. All programs funded under this initiative will be created as demonstration pilots and funded for one cycle of students. An evaluation component must be built into the request for funding. Funding decisions will be made by the Health Care Leadership Council.

Responsible Entity: Legislature
Investment: \$500,000 one-time State allocation

Action 5: Examine current reciprocity practices for ease of transfer, particularly within New England, for LPNs, CNAs.

Responsible Entity: Health Care Leadership Council
Investment: No funding requested from the State

RECOMMENDATION – 5

Establish more effective partnerships between higher education institutions and health care providers leading to greater opportunity for students to work within the health care field while pursuing their chosen program of study and better integration of employer and higher education roles.

Action 1: Pursue partnerships for work-study opportunities for students. (*Example:* Allow RN and LPN students to work as CNAs after six months of school)

Responsible Entity: Post-secondary Institutions/Health Care Providers
Investment: No funding requested from the State

Action 2: Develop a pilot career ladder program synchronizing employers and educators. Employers would provide entry-level jobs with scheduling flexibility to allow participants to attend higher level training. On completion of each step, employer would move the employee into a job at that newly acquired level of expertise. Pilot program to be developed by one employer and one college system, then expanded as appropriate.

Responsible Entity: Post-secondary Institution/Health Care Provider
Investment: No funding requested from the State

Action 3: Increase availability of clinical rotations by allowing clinical training during 2nd, 3rd, and weekend shifts.

Responsible Entity: Post-secondary Institutions/Health Care Providers
Investment: No funding requested from the State

Action 4: Provide increased support for Maine Area Health Education Center (AHEC) to develop clinical and mentoring placements for the range of health care occupations that are included in this report.

Responsible Entity: Maine AHEC
Investment: \$100,000

Action 5: Look at best practices (e.g. “Magnet Hospitals”) to analyze why they are attractive to employees and are more successful in recruitment and retention.

Responsible Entity: Health Care Leadership Council
Investment: No funding requested from the State

RECOMMENDATION – 6

Maintain current data on demand for and supply of health care workers in Maine.

Action: Continue the electronic surveys of employers on current and projected needs and of public and private higher education institutions on annual numbers of graduates and plans for expansion. This information will be obtained by occupation code and will be gathered every other year starting in 2001. This information will be made available to the Governor, the Legislature, health care providers and higher education institutions in Maine.

Responsible Entity: Health Care Leadership Council
Investment: \$15,000 annually

Note: Evaluate, coordinate, and standardize the collection of data on the supply and demand for health professionals building where possible on existing efforts such as Maine Health Care Human Resource Administrators Association, NOICC/MOICC, Maine Jobs Council, State and Local Workforce Investment Boards, Licensing Boards and Professional Associations.

PROMOTE HEALTH CARE AS AN ATTRACTIVE CAREER

RECOMMENDATION - 7

Create a communications plan to reach target audiences to build awareness of health care careers and promote them as positive career choices to potential workers.

Action 1: Recruitment of new workers is one of the fundamental issues related to the work of this Committee. The agency designated by the Legislature as responsible for implementing this report, with advice from the Health Care Leadership Council, will create a plan that defines target audiences, important messages for those audiences to help them consider health care as a career choice. They will also identify the communication vehicles that will best reach the defined

audiences within the resources available. The agency, with advice from the Council, will collaborate with existing organizations sharing these objectives to increase focus and minimize confusion among the public. The plan will be implemented, reviewed annually and updated as needed.

Responsible Entity: Legislature and the agency it designates

Investment: \$300,000 annually

TOTAL STATE FUNDS REQUESTED: \$4,500,000

Annual funding	\$4,000,000
One-time funding	\$ 500,000

MAINE
TECHNICAL COLLEGE
SYSTEM

MAINE
S T A T E
CHAMBER
of
COMMERCE

Maine Health Care Workforce Needs Survey:

**Maine's Hospitals,
Long-Term Care Facilities,
& Home Health Care Services**

A Joint Initiative

The Maine State
Chamber of Commerce
&
The Maine Technical
College System

September 2001

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Preface

The Maine State Chamber of Commerce and the Maine Technical College System have undertaken a joint initiative to assess the human resource needs of the health care industry in Maine.

Primary goals:

- ◆ Assess the projected demand for high-skill, college-level workers in three major segments of Maine's health care industry.
- ◆ Assess the projected supply of Maine's college graduates in relationship to projected health care workforce needs.
- ◆ Provide data to help Maine's higher education and public policy leaders identify health care programs that potentially need to be created or expanded to address health care industry needs.

The initial step in pursuit of these goals was to survey Maine's health care providers and higher education institutions to determine projected workforce demand versus projected graduate supply. This document represents an aggregate of survey findings.

A total of 63 health care organizations representing 30 hospitals, 79 long-term care facilities, and nine home health care services responded to the survey. All are identified in Section 3, *Appendix B*. These businesses currently employ approximately 20,000 workers in the health care occupations surveyed. These occupations are listed in Section 3, *Appendix A*.

Twenty-two of Maine's higher education institutions responded to the survey. They are identified in Section 3, *Appendix B*.

The survey does not compare its results to current labor market statistics, but it does present a real-time snapshot of industry needs from the perspective of survey participants. This information will be useful to those who wish to pursue specific strategies for enhancing Maine's available health care professionals.

For questions regarding the information presented in this document, please contact the Maine Technical College System's Center for Career Development, Research & Curriculum Division, at (207) 767-5210, ext. 115.

The Maine State Chamber of Commerce and the Maine Technical College System acknowledge with thanks and appreciation the health care providers and representatives of higher education who participated in the survey. Without their assistance this analysis would not have been possible.

Survey Methodology & Limitations

Methodology

The survey was administered electronically and via direct mail. Members of the Maine Hospital Association, Maine Health Care Association, and Home Care Association of Maine were asked to identify current employees in various health care positions and to project health care employment needs for 2002 and 2003-2005. Members of Maine's Higher Education Council were asked to identify 2001 health care-related graduates, projected 2002 graduates, and potential program expansions.

This survey used the US Department of Labor's Standard Occupational Classification (SOC) coding system. The SOC system will be used by the Maine State Department of Labor in its *Maine Employment Occupational Outlook to 2010*, expected to be available in spring 2002.

Limitations

Rather than a quantitative analysis of Maine's health care worker shortage, this survey provides qualitative data to inform policy and help decision-makers address the needs of Maine employers.

1. Most survey respondents represent hospitals, long-term health care facilities, and home health care services. It was not possible to survey private health care clinics and practices given the limited time and database resources available.
2. Survey respondents represent only a portion of the health care providers in Maine. Survey distribution was limited to the professional associations noted in the methodology.
3. This survey summary pertains primarily to health care professions requiring one or more years of post-secondary education. *Appendix A* provides comprehensive data for a wider range of health care occupations.
4. Some information provided by survey participants is based on current best estimates rather than on comprehensive business or enrollment plans. There is no assurance that respondents from participating businesses or higher education institutions had all vital data available to them at the time of the survey or that employer needs won't change.
5. This survey does not predict whether health care higher education graduates will stay in Maine to practice or move out of state. Nor does it predict the in-migration of health-care workers educated and/or currently working outside Maine.

Section 1 Significant Findings

Information given in this section—and throughout the remaining report—relies on survey data collected from Maine’s hospital, long-term care, and home health care industry segments—*not from private health care clinics or practices*. If these other organizations were included in the survey, the shortage of health care workers in many occupations could be even more severe than currently projected.

Among the significant findings:

1. A total of 2,212 workforce vacancies were projected through December 2002 for the 25 health care occupations revealing the greatest shortages. For these 25, the number of projected 2002 higher education graduates is 670. *Therefore, the total projected workforce shortage for these 25 occupations is 1,542.*
2. Through December 2002, nursing positions are projected to experience the largest occupational shortage, with a combined deficit of 1,053 registered and licensed practical nurses.
3. There is a wide range of health care occupations displaying significant projected shortages in addition to the nursing professions. These occupations revealed a combined projected shortage of 489 workers.
4. Fifteen of the top 20 health care occupations with the greatest projected shortages require one or two years of post-secondary education. Of these 15, eight are among the fastest-growing and highest-paying in the state for occupations requiring one or two years of post-secondary education. Please refer to Section 2 for more detailed data.
5. Significant shortages are projected for a number of health care occupations (e.g., pharmacist, pharmacy technician) for which there are currently no higher education programs in Maine.
6. For certain health care occupations, survey results indicate a potential over-supply of graduates relative to workforce demand. However, because graduates in these fields (e.g., medical assistant) are needed by private practitioners as well as by hospitals, long-term care facilities, and home health care services, the current survey does not reflect total workforce demand.

Section 2 Employer Workforce Demand vs. Graduate Supply

This section presents survey data for the 25 health care occupations displaying the most significant discrepancies between projected employer demand and higher education graduate supply.

The higher education requirement is generally listed as either the entry-level for an occupation or the most common academic program duration. There are many programs (e.g., registered nurse) offering students the opportunity to pursue a more advanced degree if they choose. Higher education requirements in general are increasing (e.g., one-year programs becoming Associate Degree programs) as health care occupations become more specialized.

HEALTH CARE INDUSTRY SURVEY RESULTS <i>Projected Workforce Demand vs. Projected Graduate Supply</i>					
Standard Occupational Classification (SOC) Position Title	Projected Workforce Vacancies Through 2002	Projected Higher Education Graduates 2002	<i>Projected Workforce Deficit</i>	Higher Education Requirement	1998 Midrange Wage*
1. Registered Nurses	1385	516	<i>-869</i>	Associate/ Bachelor's Degree	\$15.50 - \$20.39
2. Licensed Practical and Vocational Nurses	199	15	<i>-184</i>	1 year	\$11.14 - \$13.45
3. Radiologic Technologists and Technicians	103	41	<i>-62</i>	Associate Degree	\$12.93 - \$16.42
4. Health Information Technicians	68	11	<i>-57</i>	Associate Degree	\$8.86 - \$11.85
5. Surgical Technologists	50	4	<i>-46</i>	1 year/Associate	\$10.79 - \$13.23
6. Pharmacy Technicians	43	0	<i>-43</i>	1 year/Associate	N/A
7. Medical Transcriptionists	62	26	<i>-36</i>	1 year	\$11.58
8. Respiratory Therapists	39	8	<i>-31</i>	Associate Degree	\$13.90 - \$18.03
9. Medical & Clinical Laboratory Technologists	36	5	<i>-31</i>	Bachelor's Degree	\$16.82
10. Medical and Clinical Laboratory Technicians	38	13	<i>-25</i>	Associate Degree	\$13.13

* Wage Data Source: Maine Department of Labor

HEALTH CARE INDUSTRY SURVEY RESULTS <i>Projected Workforce Demand vs. Projected Graduate Supply</i>					
Standard Occupational Classification (SOC) Position Title	Projected Workforce Vacancies Through 2002	Projected Higher Education Graduates 2002	<i>Projected Workforce Deficit</i>	Higher Education Requirement	1998 Midrange Wage*
11. Pharmacists	19	0	-19	Advanced Degree	\$26.71 - \$39.90
12. Physical Therapist Assistants	23	4	-19	Associate Degree	\$10.73
13. Internists, General	18	0	-18	Advanced Degree	N/A
14. Diagnostic Medical Sonographers	17	0	-17	Associate Degree	N/A
15. Psychiatric Technicians	17	0	-17	1 year/Associate	\$10.00
16. Cardiovascular Technologists and Technicians	19	5	-14	Associate Degree	\$12.67 - \$18.42
17. Radiation Therapists	13	0	-13	Associate Degree	\$17.44
18. Surgeons	7	0	-7	Advanced Degree	\$52.49 - \$60.01+
19. Psychiatrists	6	0	-6	Advanced Degree	N/A
20. Nuclear Medicine Technologists	10	4	-6	Associate Degree	\$17.04
21. Obstetricians and Gynecologists	5	0	-5	Advanced Degree	N/A
22. Dietetic Technicians	23	18	-5	Associate Degree	\$11.40
23. Pediatricians, General	4	0	-4	Advanced Degree	N/A
24. Audiologists	4	0	-4	Advanced Degree	\$18.55
25. Occupational Health and Safety Specialists	4	0	-4	Associate Degree	N/A
Totals for 25 Occupations	2212	670	-1542		

* Wage Data Source: Maine Department of Labor

Section 3 *Appendixes*

A : Comprehensive Survey Data

Employers & Higher Education

B : Survey Respondents

Employers

Higher Education

C : Survey Instruments

Employers

Higher Education

Section 3 *Appendix A : Comprehensive
Survey Data*

Employers & Higher Education

The following table presents complete employer and higher education survey data.
 Note once again that the major health care industry segments surveyed were
 hospitals, long-term care facilities, and home health care services.

HEALTH CARE INDUSTRY SURVEY RESULTS September 2001							
US Department of Labor Standard Occupational Classification		Maine Workforce Demand			Higher Education Supply		
		<i>Currently Employed</i>	<i>Projected Vacancies & New Hires</i>		<i>Graduates</i>		<i>Estimated Program Expansion</i>
SOC Code	SOC Position Title		<i>Through 2002</i>	<i>2003- 2005</i>	<i>Actual 2001</i>	<i>Projected 2002</i>	<i>New Students</i>
29-0000	Healthcare Practitioners and Technical Occupations						
29-1000	Health Diagnosing and Treating Practitioners						
29-1010	<i>Chiropractors</i>						
29-1011	Chiropractors						
29-1020	<i>Dentists</i>						
29-1021	Dentists, General	2	1	1			
29-1022	Oral and Maxillofacial Surgeons		1				
29-1023	Orthodontists						
29-1024	Prosthodontists						
29-1029	Dentists, All Other Specialists						
29-1030	<i>Dietitians and Nutritionists</i>						
29-1031	Dietitians and Nutritionists	116	14	17	24	30	
29-1040	<i>Optometrists</i>						
29-1041	Optometrists	2					
29-1050	<i>Pharmacists</i>						
29-1051	Pharmacists	155	19	15			
29-1060	<i>Physicians and Surgeons</i>						
29-1061	Anesthesiologists	16	3	1			
29-1062	Family and General Practitioners	175	32	13	107	111	
29-1063	Internists, General	31	18	5			

HEALTH CARE INDUSTRY SURVEY RESULTS <i>September 2001</i>							
US Department of Labor Standard Occupational Classification		Maine Workforce Demand			Higher Education Supply		
		<i>Currently Employed</i>	<i>Projected Vacancies & New Hires</i>		<i>Graduates</i>		<i>Estimated Program Expansion</i>
SOC Code	SOC Position Title		<i>Through 2002</i>	<i>2003- 2005</i>	<i>Actual 2001</i>	<i>Projected 2002</i>	<i>New Students</i>
29-1064	Obstetricians and Gynecologists	15	5	4			
29-1065	Pediatricians, General	26	4	5			
29-1066	Psychiatrists	42	6	6			
29-1067	Surgeons	24	7	3			
29-1069	Physicians and Surgeons, All Other	225	9	5			
29-1070	<i>Physician Assistants</i>						
29-1071	Physician Assistants	201	29	11	34	37	
29-1080	<i>Podiatrists</i>						
29-1081	Podiatrists	3					
29-1110	<i>Registered Nurses</i>						
29-1111	Registered Nurses	6950	1385	886	484	516	36
29-1120	<i>Therapists</i>						
29-1121	Audiologists	9	4	3			
29-1122	Occupational Therapists	225	34	48	85	87	20
29-1123	Physical Therapists	360	54	63	87	77	5
29-1124	Radiation Therapists	94	13	11			
29-1125	Recreational Therapists	37	5	11	10	24	19
29-1126	Respiratory Therapists	297	39	32	3	8	
29-1127	Speech-Language Pathologists	77	19	28	26	30	
29-1129	Therapists, All Other	13					
29-1130	<i>Veterinarians</i>						
29-1131	Veterinarians						
29-1190	<i>Miscellaneous Health Diagnosing and Treating Practitioners</i>						
29-1199	Health Diagnosing and Treating Practitioners, All Other	12		2			

HEALTH CARE INDUSTRY SURVEY RESULTS <i>September 2001</i>							
US Department of Labor Standard Occupational Classification		Maine Workforce Demand			Higher Education Supply		
		<i>Currently Employed</i>	<i>Projected Vacancies & New Hires</i>		<i>Graduates</i>		<i>Estimated Program Expansion</i>
SOC Code	SOC Position Title		<i>Through 2002</i>	<i>2003- 2005</i>	<i>Actual 2001</i>	<i>Projected 2002</i>	<i>New Students</i>
29-2000	Health Technologists and Technicians						
29-2010	Clinical Laboratory Technologists and Technicians						
29-2011	Medical and Clinical Laboratory Technologists	387	36	47	5	5	
29-2012	Medical and Clinical Laboratory Technicians	151	38	33	12	13	4
29-2020	Dental Hygienists						
29-2021	Dental Hygienists				44	50	
29-2030	Diagnostic Related Technologists and Technicians						
29-2031	Cardiovascular Technologists and Technicians	105	19	13	3	5	
29-2032	Diagnostic Medical Sonographers	58	17	11			
29-2033	Nuclear Medicine Technologists	43	10	11	3	4	
29-2034	Radiologic Technologists and Technicians	464	103	82	27	41	
29-2040	Emergency Medical Technicians and Paramedics						
29-2041	Emergency Medical Technicians and Paramedics	378	77	93	50	79	
29-2050	Health Diagnosing and Treating Practitioner Support Technicians						
29-2051	Dietetic Technicians	84	23	25	12	18	
29-2052	Pharmacy Technicians	197	43	14			
29-2053	Psychiatric Technicians	104	17	19			
29-2054	Respiratory Therapy Technicians	45	8	10	6	8	
29-2055	Surgical Technologists	182	50	28	4	4	
29-2056	Veterinary Technologists						

HEALTH CARE INDUSTRY SURVEY RESULTS <i>September 2001</i>							
US Department of Labor Standard Occupational Classification		Maine Workforce Demand			Higher Education Supply		
		<i>Currently Employed</i>	<i>Projected Vacancies & New Hires</i>		<i>Graduates</i>		<i>Estimated Program Expansion</i>
SOC Code	SOC Position Title		<i>Through 2002</i>	<i>2003- 2005</i>	<i>Actual 2001</i>	<i>Projected 2002</i>	<i>New Students</i>
29-2060	<i>Licensed Practical and Licensed Vocational Nurses</i>						
29-2061	Licensed Practical and Licensed Vocational Nurses	758	199	202	14	15	
29-2070	<i>Medical Records and Health Information Technicians</i>						
29-2071	Medical Records and Health Information Technicians	246	68	82	11	11	
29-2080	<i>Opticians, Dispensing</i>						
29-2081	Opticians, Dispensing						
29-2090	<i>Miscellaneous Health Technologists and Technicians</i>						
29-2091	Orthotists and Prosthetists	6					
29-2099	Health Technologists and Technicians, All Other	60	15				
29-9000	<i>Other Healthcare Practitioners and Technical Occupations</i>						
29-9010	<i>Occupational Health and Safety Specialists and Technicians</i>						
29-9011	Occupational Health and Safety Specialist	11	4	3			
29-9012	Occupational Health and Safety Technicians	2	1		2	4	4
29-9090	<i>Miscellaneous Health Practitioners and Technical Workers</i>						
29-9091	Athletic Trainers	11	2	4	10	19	
29-9099	Healthcare Practitioners and Technical Workers, All Other	98			2		
31-1000	<i>Nursing, Psychiatric, and Home Health Aides</i>						
31-1010	<i>Nursing, Psychiatric, and Home Health Aides</i>						
31-1011	Home Health Aides	233	48	52	1		
31-1012	Nursing Aides, Orderlies, and Attendants	3727	1508	1207	21	42	
31-1013	Psychiatric Aides	75	22	48			

HEALTH CARE INDUSTRY SURVEY RESULTS <i>September 2001</i>							
US Department of Labor Standard Occupational Classification		Maine Workforce Demand			Higher Education Supply		
		<i>Currently Employed</i>	<i>Projected Vacancies & New Hires</i>		<i>Graduates</i>		<i>Estimated Program Expansion</i>
SOC Code	SOC Position Title		<i>Through 2002</i>	<i>2003- 2005</i>	<i>Actual 2001</i>	<i>Projected 2002</i>	<i>New Students</i>
31-2000	Occupational and Physical Therapist Assistants and Aides						
31-2010	<i>Occupational Therapist Assistants and Aides</i>						
31-2011	Occupational Therapist Assistants	44	13	16	14	14	
31-2012	Occupational Therapist Aides	3	3	5			
31-2020	<i>Physical Therapist Assistants and Aides</i>						
31-2021	Physical Therapist Assistants	69	23	24	4	4	
31-2022	Physical Therapist Aides	31	8	11			
31-9000	Other Healthcare Support Occupations						
31-9010	<i>Massage Therapists</i>						
31-9011	Massage Therapists	2			2		
31-9090	<i>Miscellaneous Healthcare Support Occupations</i>						
31-9091	Dental Assistants				7	9	
31-9092	Medical Assistants	126	17	19	70	89	
31-9093	Medical Equipment Preparers	88	10	5			
31-9094	Medical Transcriptionists	271	62	51	18	26	2
31-9095	Pharmacy Aides	10	1	1			
31-9096	Veterinary Assistants and Laboratory Animal Caretakers	2			1		
31-9099	Healthcare Support Workers, All Other	3501	767	205	54	55	
<i>All Other Survey Respondent Occupational Entries</i>							
	Nurse Anesthetists				24	27	

Section 3 *Appendix B : Survey Respondents*

Employers

We thank these Maine healthcare employers for completing the workforce needs survey.

Hospitals

- | | |
|----------------------------------|--|
| 1. Blue Hill Memorial Hospital | 16. Mid Coast Hospital |
| 2. C.A. Dean Memorial Hospital | 17. Miles Memorial Hospital |
| 3. Calais Regional Hospital | 18. Millinocket Regional Hospital |
| 4. Cary Medical Center | 19. Mt. Desert Island Hospital |
| 5. Central Maine Medical Center | 20. Northern Maine Medical Center |
| 6. Down East Community Hospital | 21. Penobscot Valley Hospital |
| 7. Eastern Maine Medical Center | 22. Sebecook Valley Hospital |
| 8. Franklin Memorial Hospital | 23. Southern Maine Medical Center |
| 9. Goodall Hospital | 24. Spring Harbor Hospital |
| 10. Houlton Regional Hospital | 25. St. Andrews Hospital |
| 11. Inland Hospital | 26. St. Joseph Hospital |
| 12. Maine Medical Center | 27. St. Mary's Regional Medical Center |
| 13. Maine General Medical Center | 28. Stephens Memorial Hospital |
| 14. Mayo Regional Hospital | 29. The Acadia Hospital |
| 15. Mercy Hospital | 30. The Aroostook Medical Center |

Home Health Care Services

- | | |
|---|---|
| 1. Bangor Area Visiting Nurses | 6. Southern Maine Health & Homecare Services |
| 2. Community Health & Counseling Services | 7. St. Andrews Home Health |
| 3. Community Health Services | 8. Stephens Memorial Home Care |
| 4. Hancock County Home Care | 9. Visiting Nurse Service of Southern Maine
& Seacoast New Hampshire |
| 5. Miles Home Health & Hospice | |

Long-Term Care Facilities

1. Aroostook Health Center
2. Atlantic Rehabilitation & Nursing Center
3. Atria Kennebunk
4. Augusta Rehabilitation Center
5. Barron Center, City of Portland
6. Birch Grove Nursing Care Center
7. Brentwood Rehabilitation & Nursing Center
8. Brewer Rehabilitation & Living Center
9. C.A. Dean Nursing Home
10. Caribou Nursing Home, Inc.
11. Cedar Ridge Center
12. Clover Health Care
13. Coastal Manor, Inc.
14. Collier's Rehabilitation & Nursing Center
15. Colonial Health Care
16. Courtland Rehabilitation & Living Center
17. Cove's Edge
18. Dexter Health Care
19. Eastside Rehabilitation & Living Center
20. Edgewood Rehabilitation & Living Center
21. Fallbrook Woods
22. Falmouth By The Sea
23. Fieldcrest Manor
24. Franciscan Home
25. Freeport Place
26. Gardiner Health Care Facility
27. Glenridge
28. Gray Birch
29. Gray Manor
30. Greenwood Center
31. Harbor Hill
32. Hawthorne House
33. Heritage Rehabilitation & Living Center
34. Huntington Common
35. Katahdin Nursing Home
36. Kennebunk Nursing & Rehabilitation Center
37. Klearview Manor
38. Maplecrest Rehabilitation & Living Center
39. Market Square Health Care
40. Marshwood Center
41. Mercy Home
42. Newton Center - Skilled Nursing Home
43. Northland Living Center
44. Norway Rehabilitation & Living Center
45. Oak Grove Rehabilitation & Living Center
46. Oceanview Nursing & Residential Care
47. Orchard Park Rehabilitation & Living Center
48. Orono Commons
49. Peabody House
50. Pine Point Nursing Center
51. Plant Memorial Home
52. Portland Center for Assisted Living
53. Presque Isle Nursing Home
54. River Ridge
55. Ross Manor
56. Sandy River Center for Healthcare

Long-Term Care Facilities, *continued*

- | | |
|--|--|
| 57. Sanfield Rehabilitation & Living Center | 69. St. Marguerite d'Youville Pavilion |
| 58. Seaside Rehabilitation & Health Care Center | 70. Stillwater Health Care |
| 59. Sedgewood Commons | 71. Strong Nursing Home |
| 60. Sentry Commons – Harbor Home | 72. The Maine Stay Nursing Home |
| 61. Sentry Commons – Homestead | 73. The Renaissance |
| 62. Seventy-Five State Street | 74. Washington Manor |
| 63. Shore Village Rehabilitation & Living Center | 75. Washington Place Assisted Living Center |
| 64. Somerset Rehabilitation & Living Center | 76. Westgate Manor |
| 65. Sonogee Rehabilitation & Living Center | 77. Windward Gardens |
| 66. Southridge Rehabilitation & Living Center | 78. Winship Green Nursing Center |
| 67. Springbrook Health Care & Rehabilitation | 79. Woodlawn Rehabilitation & Nursing Center |
| 68. St. Joseph's Manor | |

These long-term care businesses provided data for multiple facilities:

- | | |
|------------------------------------|-----------------------------------|
| 1. Continuum Health Services – 3 | 4. North Country Associates – 12 |
| 2. First Atlantic Corporation – 13 | 5. Sandy River Health System – 12 |
| 3. Kindred Healthcare, Inc. – 10 | |

Health Care Support Services

1. Affiliated Healthcare Systems
2. Delta Ambulance
3. New England Mobile X-Ray

Section 3 *Appendix B : Survey Respondents*

Higher Education

We thank these Maine higher education institutions for participating in the survey.

1. Andover College
2. Beal College
3. Central Maine Medical Center School of Nursing
4. Central Maine Technical College
5. College of the Atlantic
6. Eastern Maine Technical College
7. Husson College
8. Kennebec Valley Technical College
9. Maine Maritime Academy
10. Northern Maine Technical College
11. Saint Joseph's College
12. Southern Maine Technical College
13. University of Maine
14. University of Maine at Augusta
15. University of Maine at Farmington
16. University of Maine at Fort Kent
17. University of Maine at Machias
18. University of Maine at Presque Isle
19. University of New England
20. University of Southern Maine
21. Washington County Technical College
22. York County Technical College

Section 3 *Appendix C : Survey Instruments*

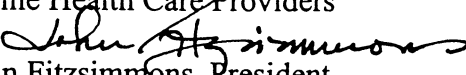
Employers

MAINE
TECHNICAL COLLEGE
S Y S T E M

OFFICE OF THE PRESIDENT

323 STATE STREET, AUGUSTA, MAINE 04330-7131
(207) 287-1070 Fax (207) 287-1037

June 15, 2001

To: Maine Health Care Providers

From: John Fitzsimmons, President
Maine Technical College System
Re: Health Care Skilled Worker Shortage

*Maine is on the verge of a crisis – our health care industry
is unable to find qualified employees.*

We have a problem and we need to work together to find both short- and long-term solutions.

As you are probably aware, a Health Care Skilled Worker Shortage Taskforce was established this spring to develop a plan of action to help address Maine's concerns. As part of that plan, we are surveying all health care providers in Maine to determine the current level of need for skilled workers by occupation. At the same time we are surveying health care providers, we are also surveying Maine's institutions of higher education, both public and private, to see how many students they are graduating each year to support Maine's health care workforce needs.

The information gained from this survey will be highly valuable in helping Maine's higher education institutions increase the output of graduates in health care fields. Your assistance in helping us identify the areas that face shortfalls is critical to an effective plan of action. Please be assured that the information provided by individual health care providers will not be released publicly other than in the aggregate. Once all of the information has been collected we will share a copy of the results with you for your review.

I would deeply appreciate you forwarding this memo on to someone in your organization who can complete the survey and have it returned to my office no later than Friday, June 29, 2001. A copy of the survey is attached, or if you prefer, the survey can be accessed electronically for submission online at <http://survey.mtcs.net>. Should you have any questions in advance, please do not hesitate to contact my office at 207-287-1070 or by email at jfitzsimmons@mtcs.net. Thank you for your assistance with this very important project.

Note: For your information, this survey is part of a larger project being conducted by the Maine State Chamber of Commerce and the Maine Technical College System to survey all of the critical industries in Maine.

Central Maine
Technical College
Auburn

Eastern Maine
Technical College
Bangor

Kennebec Valley
Technical College
Fairfield

Northern Maine
Technical College
Presque Isle

Southern Maine
Technical College
South Portland

Washington County
Technical College
Calais

York County
Technical College
Wells



Healthcare Workforce Needs Survey

The Maine State Chamber of Commerce and the Maine Technical College System are undertaking a joint initiative to meet the human resource needs of Maine's Healthcare industry.

Project Goals

- **To identify current and projected high skill worker shortages in Maine's business community in relationship to the number of college students graduating in respective fields.**
- **To provide Maine's public and private higher education institutions with the data needed to better allocate current education and training resources.**
- **To identify the need for new higher education and training programs.**

We would like to thank you in advance for your time and effort in completing this survey. The information provided will be reported in a general format and no specific references will be made in regards to your firm without specific permission.

If you have any questions about the project or the survey instrument please feel free to contact the Maine Technical College System's Center for Career Development Research and Curriculum Division at (207)767-5210 Ext. 115.

In order to address the high skill labor shortage, this survey must be completed by June 29th, 2001.

ENTER SURVEY

Comments & Suggestions

Survey for
Maine State Chamber of Commerce
&
Maine Technical College System

Company Name: Total Number of Employees in Maine: Are you a Public ☐ or Private ☐ agencyNumber of full-time employees you have: Number of part-time employees you have: Street Address: City: State: Zip Code: Name of individual completing survey: Email Address: Title: Phone number: () - Ext.

Clicking on a position will take you to a description of that position.	Projected Vacancies Plus Any New Hires		
	Currently Employed in This Position	Thru December 31, 2002	2003 - 2005
Healthcare Industry Position Title			
29-1000 Health Diagnosing and Treating Practitioners			
<u>29-1010 Chiropractors</u>			
<u>29-1011 Chiropractors</u>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<u>29-1020 Dentists</u>			
<u>29-1021 Dentists, General</u>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<u>29-1022 Oral and Maxillofacial Surgeons</u>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<u>29-1023 Orthodontists</u>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<u>29-1024 Prosthodontists</u>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<u>29-1029 Dentists, All Other Specialists</u>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<u>29-1030 Dietitians and Nutritionists</u>	<input type="text"/>	<input type="text"/>	<input type="text"/>

<u>29-1031 Dietitians and Nutritionists</u>			
<u>29-1040 Optometrists</u>			
<u>29-1041 Optometrists</u>			
<u>29-1050 Pharmacists</u>			
<u>29-1051 Pharmacists</u>			
<u>29-1060 Physicians and Surgeons</u>			
<u>29-1061 Anesthesiologists</u>			
<u>29-1062 Family and General Practitioners</u>			
<u>29-1063 Internists, General</u>			
<u>29-1064 Obstetricians and Gynecologists</u>			
<u>29-1065 Pediatricians, General</u>			
<u>29-1066 Psychiatrists</u>			
<u>29-1067 Surgeons</u>			
<u>29-1069 Physicians and Surgeons, All Other</u>			
<u>29-1070 Physician Assistants</u>			
<u>29-1071 Physician Assistants</u>			
<u>29-1080 Podiatrists</u>			
<u>29-1081 Podiatrists</u>			
<u>29-1110 Registered Nurses</u>			
<u>29-1111 Registered Nurses</u>			
<u>29-1120 Therapists</u>			
<u>29-1121 Audiologists</u>			
<u>29-1122 Occupational Therapists</u>			
<u>29-1123 Physical Therapists</u>			
<u>29-1124 Radiation Therapists</u>			
<u>29-1125 Recreational Therapists</u>			
<u>29-1126 Respiratory Therapists</u>			
<u>29-1127 Speech-Language Pathologists</u>			
<u>29-1129 Therapists, All Other</u>			
<u>29-1130 Veterinarians</u>			
<u>29-1131 Veterinarians</u>			
<u>29-1190 Miscellaneous Health Diagnosing and Treating Practitioners</u>			
<u>29-1199 Health Diagnosing and Treating Practitioners, All Other</u>			
<u>29-2000 Health Technologists and Technicians</u>			
<u>29-2010 Clinical Laboratory Technologists and Technicians</u>			
<u>29-2011 Medical and Clinical Laboratory Technologists</u>			
<u>29-2012 Medical and Clinical Laboratory Technicians</u>			

29-2020 Dental Hygienists			
29-2021 Dental Hygienists			
29-2030 Diagnostic Related Technologists and Technicians			
29-2031 Cardiovascular Technologists and Technicians			
29-2032 Diagnostic Medical Sonographers			
29-2033 Nuclear Medicine Technologists			
29-2034 Radiologic Technologists and Technicians			
29-2040 Emergency Medical Technicians and Paramedics			
29-2041 Emergency Medical Technicians and Paramedics			
29-2050 Health Diagnosing and Treating Practitioner Support Technicians			
29-2051 Dietetic Technicians			
29-2052 Pharmacy Technicians			
29-2053 Psychiatric Technicians			
29-2054 Respiratory Therapy Technicians			
29-2055 Surgical Technologists			
29-2056 Veterinary Technologists and Technicians			
29-2060 Licensed Practical and Licensed Vocational Nurses			
29-2061 Licensed Practical and Licensed Vocational Nurses			
29-2070 Medical Records and Health Information Technicians			
29-2071 Medical Records and Health Information Technicians			
29-2080 Opticians, Dispensing			
29-2081 Opticians, Dispensing			
29-2090 Miscellaneous Health Technologists and Technicians			
29-2091 Orthotists and Prosthetists			
29-2099 Health Technologists and Technicians, All Other			
29-9000 Other Healthcare Practitioners and Technical Occupations			
29-9010 Occupational Health and Safety Specialists and Technicians			
29-9011 Occupational Health and Safety Specialists			
29-9012 Occupational Health and Safety Technicians			
29-9090 Miscellaneous Health Practitioners and Technical Workers			

<u>29-9091 Athletic Trainers</u>			
<u>29-9099 Healthcare Practitioners and Technical Workers, All Other</u>			
31-1000 Nursing, Psychiatric, and Home Health Aides			
31-1010 Nursing, Psychiatric, and Home Health Aides			
<u>31-1011 Home Health Aides</u>			
<u>31-1012 Nursing Aides, Orderlies, and Attendants</u>			
<u>31-1013 Psychiatric Aides</u>			
31-2000 Occupational and Physical Therapist Assistants and Aides			
31-2010 Occupational Therapist Assistants and Aides			
<u>31-2011 Occupational Therapist Assistants</u>			
<u>31-2012 Occupational Therapist Aides</u>			
31-2020 Physical Therapist Assistants and Aides			
<u>31-2021 Physical Therapist Assistants</u>			
<u>31-2022 Physical Therapist Aides</u>			
31-9000 Other Healthcare Support Occupations			
31-9010 Massage Therapists			
<u>31-9011 Massage Therapists</u>			
31-9090 Miscellaneous Healthcare Support Occupations			
<u>31-9091 Dental Assistants</u>			
<u>31-9092 Medical Assistants</u>			
<u>31-9093 Medical Equipment Preparers</u>			
<u>31-9094 Medical Transcriptionists</u>			
<u>31-9095 Pharmacy Aides</u>			
<u>31-9096 Veterinary Assistants and Laboratory Animal Caretakers</u>			
<u>31-9099 Healthcare Support Workers, All Other</u>			

Please be sure all of your information is correct before submitting this survey.

Submit	Reset
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Section 3 *Appendix C : Survey Instruments*

Higher Education

MAINE
TECHNICAL COLLEGE
S Y S T E M

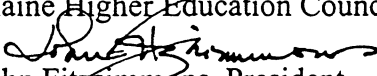
OFFICE OF THE PRESIDENT

323 STATE STREET, AUGUSTA, MAINE 04330-7131

(207) 287-1070 Fax (207) 287-1037

June 7, 2001

To: Maine Higher Education Council Members

From: 
John Fitzsimmons, President
Maine Technical College System

Re: Maine State Chamber Project

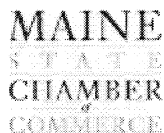
The Maine State Chamber of Commerce and Maine Technical College System are beginning a very exciting project to identify Maine's current and future skilled worker shortage and we need your assistance. We have created an electronic survey that will allow us to collect data on current and future job openings for positions that require one year of college or more. Our goal is to match this information against the number of graduates from each higher education institution within specific occupations in order to identify the skills gap.

We will be conducting the survey in groups by occupations. The first area we have identified is health care and we are presently surveying health care providers throughout the state of Maine. What we will need to know from you is the number of students graduating from your colleges in specific occupations. I would ask that you please forward to me at jfitzsimmons@mtcs.net an email address of an individual at your institution to whom we can send the survey. Once the results have been finalized for all of the occupational areas, we will forward a copy to you. I am hopeful you will find the results useful in planning new programs or expanding current offerings.

Thank you in advance for your assistance with this important project. Should you have any questions, please do not hesitate to contact me.

JF/ejc

Cc: Dana Connors, President
Maine State Chamber of Commerce



Higher Education Survey

The Maine State Chamber of Commerce and the Maine Technical College System are undertaking a joint initiative to meet the human resource needs of Maine's Healthcare industry.

Project Goals

- **To identify current and projected high skill worker shortages in Maine's business community in relationship to the number of college students graduating in respective fields.**
- **To provide Maine's public and private higher education institutions with the data needed to better allocate current education and training resources.**
- **To identify the need for new higher education and training programs.**

We would like to thank you in advance for your time and effort in completing this survey. The information provided will be reported in a general format and no specific references will be made in regards to your firm without specific permission.

If you have any questions about the project or the survey instrument please feel free to contact the Maine Technical College System's Center for Career Development Research and Curriculum Division at (207)767-5210 Ext. 115.

In order to address the high skill labor shortage, this survey must be completed by July 29th, 2001.

ENTER SURVEY

Comments & Suggestions

Survey of Institutions of Higher Education in Maine for the
Maine State Chamber of Commerce
 &
Maine Technical College System

Name of institution:

Are you a public or private institution of higher education: Public ☐ Private ☐

	Maine Residents	Non-Maine Residents	Total
Number of matriculated full-time students at your institution:	<input type="text"/>	<input type="text"/>	<input type="text"/>
Number of matriculated part-time students at your institution:	<input type="text"/>	<input type="text"/>	<input type="text"/>
Total of matriculated full and part-time students:	<input type="text"/>	<input type="text"/>	<input type="text"/>

Street Address:

City:

State:

Zip Code:

Name of individual completing survey: Email address: Title: Phone number: () - Ext. (for verification purposes)

<i>Clicking on a position will take you to a description of that position.</i>	Graduates		
<u>Healthcare Industry Academic Programs Listing</u> <i>For each respective academic program area listed below, please type in the number of graduates in the boxes to the right . Leave the box blank if you do not have students in an occupational area.</i>	Actual 2001	Projected 2002	If you have committed to expansion of this program, enter the additional number of students per year expected to enroll.
29-1000 Health Diagnosing and Treating			

Practitioners			
29-1010 Chiropractors			
29-1011 Chiropractors			
29-1020 Dentists			
29-1021 Dentists, General			
29-1022 Oral and Maxillofacial Surgeons			
29-1023 Orthodontists			
29-1024 Prosthodontists			
29-1029 Dentists, All Other Specialists			
29-1030 Dietitians and Nutritionists			
29-1031 Dietitians and Nutritionists			
29-1040 Optometrists			
29-1041 Optometrists			
29-1050 Pharmacists			
29-1051 Pharmacists			
29-1060 Physicians and Surgeons			
29-1061 Anesthesiologists			
29-1062 Family and General Practitioners			
29-1063 Internists, General			
29-1064 Obstetricians and Gynecologists			
29-1065 Pediatricians, General			
29-1066 Psychiatrists			
29-1067 Surgeons			
29-1069 Physicians and Surgeons, All Other			
29-1070 Physician Assistants			
29-1071 Physician Assistants			
29-1080 Podiatrists			
29-1081 Podiatrists			
29-1110 Registered Nurses			
29-1111 Registered Nurses			
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29-1121 Audiologists			
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29-1123 Physical Therapists			
29-1124 Radiation Therapists			
29-1125 Recreational Therapists			
29-1126 Respiratory Therapists			
29-1127 Speech-Language Pathologists			
29-1129 Therapists, All Other			
29-1130 Veterinarians			

<u>29-1131 Veterinarians</u>			
<u>29-1190 Miscellaneous Health Diagnosing and Treating Practitioners</u>			
<u>29-1199 Health Diagnosing and Treating Practitioners, All Other</u>			
<u>29-2000 Health Technologists and Technicians</u>			
<u>29-2010 Clinical Laboratory Technologists and Technicians</u>			
<u>29-2011 Medical and Clinical Laboratory Technologists</u>			
<u>29-2012 Medical and Clinical Laboratory Technicians</u>			
<u>29-2020 Dental Hygienists</u>			
<u>29-2021 Dental Hygienists</u>			
<u>29-2030 Diagnostic Related Technologists and Technicians</u>			
<u>29-2031 Cardiovascular Technologists and Technicians</u>			
<u>29-2032 Diagnostic Medical Sonographers</u>			
<u>29-2033 Nuclear Medicine Technologists</u>			
<u>29-2034 Radiologic Technologists and Technicians</u>			
<u>29-2040 Emergency Medical Technicians and Paramedics</u>			
<u>29-2041 Emergency Medical Technicians and Paramedics</u>			
<u>29-2050 Health Diagnosing and Treating Practitioner Support Technicians</u>			
<u>29-2051 Dietetic Technicians</u>			
<u>29-2052 Pharmacy Technicians</u>			
<u>29-2053 Psychiatric Technicians</u>			
<u>29-2054 Respiratory Therapy Technicians</u>			
<u>29-2055 Surgical Technologists</u>			
<u>29-2056 Veterinary Technologists and Technicians</u>			
<u>29-2060 Licensed Practical and Licensed Vocational Nurses</u>			
<u>29-2061 Licensed Practical and Licensed Vocational Nurses</u>			
<u>29-2070 Medical Records and Health Information Technicians</u>			
<u>29-2071 Medical Records and Health Information Technicians</u>			
<u>29-2080 Opticians, Dispensing</u>			
<u>29-2081 Opticians, Dispensing</u>			
<u>29-2090 Miscellaneous Health Technologists and Technicians</u>			

29-2091 Orthotists and Prosthetists			
29-2099 Health Technologists and Technicians, All Other			
29-9000 Other Healthcare Practitioners and Technical Occupations			
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29-9091 Athletic Trainers			
29-9099 Healthcare Practitioners and Technical Workers, All Other			
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31-1010 Nursing, Psychiatric, and Home Health Aides			
31-1011 Home Health Aides			
31-1012 Nursing Aides, Orderlies, and Attendants			
31-1013 Psychiatric Aides			
31-2000 Occupational and Physical Therapist Assistants and Aides			
31-2010 Occupational Therapist Assistants and Aides			
31-2011 Occupational Therapist Assistants			
31-2012 Occupational Therapist Aides			
31-2020 Physical Therapist Assistants and Aides			
31-2021 Physical Therapist Assistants			
31-2022 Physical Therapist Aides			
31-9000 Other Healthcare Support Occupations			
31-9010 Massage Therapists			
31-9011 Massage Therapists			
31-9090 Miscellaneous Healthcare Support Occupations			
31-9091 Dental Assistants			
31-9092 Medical Assistants			
31-9093 Medical Equipment Preparers			
31-9094 Medical Transcriptionists			
31-9095 Pharmacy Aides			

31-9096 Veterinary Assistants and Laboratory Animal Caretakers			
31-9099 Healthcare Support Workers, All Other			

Please be sure all of your information is correct before submitting this survey.

Submit	Reset
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Document prepared by—

Research & Curriculum Division
Center for Career Development
Part of the Maine Technical College System

Southern Maine Technical College
2 Fort Road ♦ South Portland, ME 04106
Tel: 207-767-5210 Fax: 207-767-2542

Document available at—
www.mtcs.net

The Maine Technical College System does not discriminate and complies with applicable laws prohibiting discrimination on the grounds of race, color, religion, sex, national origin or citizenship status, age, disability, or veteran's status in employment, education, and all other areas of the System. The System provides reasonable accommodation to qualified individuals with disabilities upon request.

Appendix B

Health Care Worker Shortage Action Plan Action Recommendations from Northern Maine Focus Group May 23, 2001

All suggestions of the group are recorded here. Number of votes received in the multi-voting to select the top three recommendations is indicated after the recommendation in parentheses; no number indicates no votes were received. The top three recommendations by vote count are highlighted. If the recommendation is both a short- and long-term recommendation, (S<) is indicated.

Short-term

- ◆ **Look at other states successful recruitment and retention strategies to see what can be applied to Maine. (8)**
- ◆ **Increase employer sponsorship of education in return for a period of employment commitment. Sponsorship would include tuition, salary for time lost in classes, daycare. Shorten time to get licensed/certified. (7)**
- ◆ **Have secondary technology centers and colleges work together so students can get maximum credit transfer between high school and college and among levels/institutions of higher education. This includes both technical and liberal arts courses. (7) (S<)**
- ◆ **Educate guidance counselors on all aspects of health care occupations and find ways to help them influence students positively toward health care professions. (6)**
- ◆ Better geographic access through use of technology and human resources in delivering education. **(4) (S<)**
- ◆ Match students on waiting lists for higher education programs with vacancies in other regions. **(4)**
- ◆ Capitalize on attracting non-traditional students through use of technology in program delivery. **(1)**
- ◆ Expand the use of mentorships and internships in health occupations. **(1)**
- ◆ Utilize students and former students in student recruitment. The Student Nurses Association has a “Breakthrough to Nursing” model and the National Nurses Association has a model. **(1)**
- ◆ Look into why interest in health occupations is low, specifically to attract more high school students.
- ◆ Instructors should go to where students are for classes and clinical site instruction rather than students coming to a school.
- ◆ Facilities need to make a commitment to training, clinical sites and financial investment.
- ◆ There needs to be sufficient orientation time on the job for new workers so they become more proficient before working independently (this addresses both attraction and retention).
- ◆ Employers, both industry and academic institutions, should look at reward systems to support current nurses to improve retention.
- ◆ Increase focus on geriatrics and EMT as emerging priorities for the industry.

- ◆ Restructure curriculum so there is earlier exposure to courses core to the professions to improve recruitment and retention.
- ◆ Match theoretical learning and clinical/practical application more closely to create a learn/do model throughout programs.
- ◆ Provide more exposure to the industry for high school students through job shadows, videos, Internet information.
- ◆ In clinical work, match students' time in the worksite to insure maximum exposure to job duties and real pace of work at peak times vs having them there during down times to improve worker retention.

Long-Term

- ◆ **Have secondary technology centers and colleges work together so students can get maximum credit transfer between high school and college and among levels/institutions of higher education. This includes both technical and liberal arts courses. (9) (S<)**
- ◆ **Reimbursement levels negatively affect retention in all occupations in long-term care, community health and hospital settings. (9)**
- ◆ **Salaries negatively affect recruitment and retention in and public perception of health care occupations. (7)**
- ◆ **Standardize non-licensed staff certifications across various settings, and define career ladders for licensed occupations with uniformity of requirements. (Expressed an issue of state regulation.) Maximize the value of coursework and clinical work for various certifications in variety of settings. (6)**
- ◆ Provide financial aid that is field related vs. income related. (5)
- ◆ Employers must make financial commitments to educate staff despite restrictive regulatory cost reimbursement system. (3) (S<)
- ◆ Expand the associate degree in nursing so there are more stepping stones on the way to higher level positions (e.g. CAN to LPN to RN to BSN) so people can continue their education while working in progressively higher, better paying jobs. (1)
- ◆ Expand capacity of programs through increased staffing, physical facilities (classrooms/labs), learning technology.
- ◆ Better geographic access through use of technology and human resources in delivering education. (S<)
- ◆ Colleges need to work together to improve career guidance for entire career ladders within health care that cover different levels of academic programs/institutions.
- ◆ Decrease the nurse educator to student ratio for clinical experiences.
- ◆ Increase the amount of practical/clinical education.
- ◆ Improve the academic preparation of high school students to enter health care occupations.
- ◆ Change students' expectations that they can get just basic information then get a job; attitude shift needed because of the complexity of health care occupations.

- ◆ Expand health care career opportunities statewide.
- ◆ Help people manage the cost of education and impact of lost earnings when they are both working and going to school.
- ◆ Understand what students for in their education for these occupations to attract them.

Action Recommendations from Eastern Maine Focus Group

May 24, 2001

All suggestions of the group are recorded here. Number of votes received in the multi-voting to select the top three recommendations is indicated after the recommendation in parentheses; no number indicates no votes were received. The top three recommendations by vote count are highlighted. If the recommendation is both a short- and long-term recommendation, (S<) is indicated.

Short-term

- ◆ **Create a statewide group representing health care human resource planning with dedicated staff to assure that the efforts of this project are sustained. (9)**
- ◆ **Initiate public education campaign on health care occupations to promote them in the schools K-12, with guidance counselors and parents, and to inform the public and legislators about them. (8) (S<).**
- ◆ **Create planning/action committees in local communities to address health care occupation issues in their local communities. This would mirror the state-level effort. (4) (S<)**
- ◆ **Legislature needs to appropriate more funds for faculty recruitment especially given the impact of this problem to the whole state. (4) (S<)**
- ◆ Address ways to increase salaries for unlicensed personnel (e.g. CNAs, technicians). (3)
- ◆ Create better information/communications with current staff about career opportunities across occupations within health care. (2) (S<)
- ◆ Conduct research to learn how much is being spent on travelers (contract staff) vs. education/tuition reimbursement in health care now. (1)
- ◆ Salaries need to be increased for instructors at the collegiate level, nursing was mentioned specifically, since instructors will also be retiring. Should research how many will be retiring in the next 12 months. (1) (S<)
- ◆ Research existing information on best practices in recruitment and retention of key staff and what motivates people to enter and stay in health care occupations. The “Nurse Recruitment and Retention Study” conducted by the National Nurses Association (?) is a reference. (1)
- ◆ Find ways to attract nurses back to the profession. Define the industry’s needs and individuals’ needs and match skills with medical settings, including ways to update knowledge and skills. (1) (S<)
- ◆ Health care institutions need to listen to employees’ needs, respect what is being said and follow-through on addressing the needs. Look at more collaboration between administrators and nurses and find any successful models of this. (1) (S<)
- ◆ Employers should provide more educational benefits and incentives to increase retention and sustain this consistently through all business cycles. (S<)

- ◆ Employers should make recruitment and retention part of their strategic plans and provide funding to oversee this and coordinate meeting the worksite need with area colleges. (ST<)
- ◆ Health Care industry needs to provide paid release time to employees to teach in order to expand the number of education/training spots available. (S<)
- ◆ Facilitate pharmacy technician certifications in hospitals.
- ◆ Recruit current students by explaining the benefits and career ladders in health care occupations.

Long-term

- ◆ **Initiate public education campaign on health care occupations to promote them in the schools K-12, with guidance counselors and parents, and to inform the public and legislators about them. (5) (S<).**
- ◆ **Create planning/action committees in local communities to address health care occupation issues in their local communities. This would mirror the state-level effort. (4) (S<)**
- ◆ **Find ways to fast-track non-traditional students in academic programs at all levels (USM's masters degree in nursing is a model). (4)**
- ◆ **Increase funding in general. (4)**
- ◆ **Legislature needs to appropriate more funds for faculty recruitment especially given the impact of this problem to the whole state. (3) (S<)**
- ◆ Hospitals need to become formal places of education (certification, licensing, clinical sites). This includes supporting more clinical training sites, looking at the mix in the curriculum of classroom and clinical experience and considering clinical oversight as part of the productivity equation for staff. (3)
- ◆ Create a more comprehensive financial aid package in return for a commitment to employment for a specific period (military model). (2)
- ◆ Maine needs a pharmacy program targeted to hospitals and home health care rather than retail. (1)
- ◆ Create a systematic way to offer quality clinical experience in sites in Maine to out-of-state students, specifically in pharmacy though could be in other health occupations. (1)
- ◆ Health care institutions need to listen to employees' needs, respect what is being said and follow-through on addressing the needs. Look at more collaboration between administrators and nurses and find any successful models of this. (1) (S<)
- ◆ Create better information/communications with current staff about career opportunities across occupations within health care. (2) (S<)
- ◆ Fix the support services related to nursing that make nursing services more difficult.
- ◆ Restructure the nursing curriculum to the pharmacy model, where classroom learning is front-end loaded and clinical experience is back-end loaded.
- ◆ Create a new occupation, Qualified Pharmacy Assistant, and a training program for it in Maine.

- ◆ Employers should provide more educational benefits and incentives to increase retention and sustain this consistently through all business cycles. (S<)
- ◆ Spending less on travelers (contract staff) and more on education to prepare workers in Maine.
- ◆ Health Care industry needs to provide paid release time to employees to teach in order to expand the number of education/training spots available. (S<)
- ◆ Reduce/avoid creating barriers to licensing for non-residents.
- ◆ Employers should make recruitment and retention part of their strategic plans and provide funding to oversee this and coordinate meeting the worksite need with area colleges. (S<)
- ◆ Increase funding for nursing education.
- ◆ Create incentives, age-specific incentives, to keep existing staff from retiring.
- ◆ Find ways to attract nurses back to the profession. Define the industry's needs and individuals' needs and match skills with medical settings, including ways to update knowledge and skills. (S<)
- ◆ Create better linkages between secondary school education (e.g. CAN) and both employment and high education.
- ◆ Provide additional scholarship resources for high school and other levels/types of students.

Action Recommendations from Central Maine Focus Group

June 7, 2001

All suggestions of the group are recorded here. Number of votes received in the multi-voting to select the top three recommendations is indicated after the recommendation in parentheses; no number indicates no votes were received. The top three recommendations by vote count are highlighted. If the recommendation is both a short- and long-term recommendation, (S<) is indicated.

Short-Term

- ◆ **Create a better bridge between education and health care provider operations and among provider operations. This includes:**

*providing more joint appointments (organization staff/higher education faculty positions)
 *creating more of a team approach to overseeing clinical experiences
 training and using a greater number of mentors in wider geographic areas.

(Currently the one-on-one structure limits the number of students that can be accommodated by any one organization and often necessitates students traveling long distances to clinical sites. Mentors could function in a more distributed way and use technology to maintain contact with faculty or supervisory staff using various technologies.) (6) (S<)

- ◆ **Work with high schools to encourage higher level of participation in health care occupations by:**
 - *Improving guidance services to encourage health care exploration and education.
 - *Go into schools personally to counsel and inform students about the profession.

***Work with schools to upgrade the academic preparation of students, particularly in math and science, to improve their options in health care occupations. (4) (S<)**

- ◆ **Use nursing profession as a public voice to push for better funding because of the credibility the profession has. (4)**
- ◆ **Educate the public (parents, students, school staff) about the health care profession, possibly by creating a video. (3) (S<)**
- ◆ **Encourage RNs to go into long-term care. (3)**
- ◆ **Employers should pay attention to retention issues such as job satisfaction. (3) (S<)**
- ◆ **Provide incentives (financial, scheduling flexibility, etc.) to existing practitioners to upgrade their skills to move up career ladders within an occupation and to move across specialties. (3) (S<)**
- ◆ **Expand the number of clinical site positions for lab technicians. (1) (S<)**
- ◆ **Through collaborations with rehab agencies, tap into supply of workers who have restrictions/disabilities or are retired/semi-retired. (1)**
- ◆ **Employers provide financial incentives for advanced education. (1)**
- ◆ **Promote health care occupations to non-traditional candidates (specifically men for nursing). (1)**
- ◆ **Compensating/reimbursing staff for continuing education. (1)**
- ◆ **Collect information about where opportunities exist for health care workers across all settings (traditional institutions, various community businesses that hire health professionals, etc.) for current information and to predict future demand.**
- ◆ **Create a greater supply of health care educators to provide more educational opportunities.**
- ◆ **Tap existing practitioners as faculty.**
- ◆ **Provide more leadership training, apart from management training, to staff.**

Long-term

- ◆ **Provide or expand programs in Maine in all areas of health care where there are needs for workers in-state (e.g. lab technicians, radiology, surgical technicians, pharmacy). (9)**
- ◆ **Increase financial aid (8):**
 - *Forgive student loans for serving in under-served medical specialties, including nursing, radiological technicians, surgical technicians, pharmacists.**
 - *Create stipends for non-physician training (Medicare does this for physicians)**
 - *More comprehensive financial support for non-traditional students (scholarships, stipends).**
 - *Financial support for those who need additional education to become teachers in health care occupations.**
- ◆ **Employers should pay attention to retention issues such as job satisfaction. (3) (S<)**

- ◆ Create non-traditional career pathways within health care systems that allow people to move from wherever they are in non-health care occupations into healthcare occupations. **(2)**
- ◆ Modify programs to accommodate non-traditional students (e.g. deliver programs at the worksite). **(2)**

Work with high schools to encourage higher level of participation in health care occupations by **(2) (S<)**:

- *Improving guidance services to encourage health care exploration and education.
- *Go into schools personally to counsel and inform students about the profession.
- *Work with schools to upgrade the academic preparation of students, particularly in math and science, to improve their options in health care occupations.

- ◆ Improve coordination/bridging between higher education programs so that people can get the maximum credit for academic and clinical work without repeating material. **(1)**
- ◆ Create a central clearinghouse for clinical sites, because there is a mismatch of opportunities and need, and for grant-writing and support. **(1)**
- ◆ Create a better bridge between education and health care provider operations and among provider operations. This includes:
 - *providing more joint appointments (organization staff/higher education faculty positions)
 - *creating more of a team approach to overseeing clinical experiences training and using a greater number of mentors in wider geographic areas.

(Currently the one-on-one structure limits the number of students that can be accommodated by any one organization and often necessitates students traveling long distances to clinical sites. Mentors could function in a more distributed way and use technology to maintain contact with faculty or supervisory staff using various technologies.) **(1)**

- ◆ Combine/simplify funding programs designed to support training so they are less complicated (e.g. Governor's Training Initiative). **(1)**
- ◆ Encourage RNs to go into long-term care. **(S<)**
- ◆ Educate the public (parents, students, school staff) about the health care profession, possibly by creating a video. **(S<)**
- ◆ Focus on getting people to consider health care professions by promoting the rewards of the profession.
- ◆ Provide incentives (financial, scheduling flexibility, etc.) to existing practitioners to upgrade their skills to move up career ladders within an occupation and to move across specialties. **(S<)**
- ◆ Expand the number of clinical site positions for lab technicians.
- ◆ Lighten the burden of regulation when compliance reduces time available for patient care.
- ◆ Develop more incentives to share staff rather than "stealing" staff, including better collaboration and joint appointments with higher education institutions.
- ◆ Provide curriculum to improve specialized training for nurses.
- ◆ Improve technology infrastructure and applications to increase efficiency in areas not involved in direct care and at the bedside and provide financial and training support to realize the benefit of the technology.

Action Recommendations from Southern Maine Focus Group

June 8, 2001

All suggestions of the group are recorded here. Number of votes received in the multi-voting to select the top three recommendations is indicated after the recommendation in parentheses; no number indicates no votes were received. The top three recommendations by vote count are highlighted. If the recommendation is both a short- and long-term recommendation, (S<) is indicated.

Short-Term

- ◆ **Quantify the states needs and vacancy rates in each health care occupation to identify where to direct resources. (6)**
- ◆ **Implement an aggressive advertising and recruitment campaign for health professions. (5)**
- ◆ **Get employment agencies (e.g. Training Resource Center/Career Centers) to facilitate and promote movement of clients to health care occupations (including those from fishing industry downsizing). (4)**
- ◆ **Create an ongoing mass media campaign to promote the health care field using practitioners as spokespeople and targeting both school age students and mid-career candidates. (4) (S<)**
- ◆ **Improve the education of guidance counselors, science teachers and health educators about health care occupations to increase interest. (4)**
- ◆ **Increase scholarships from employers in return for commitment to employment. (4)**
- ◆ Expand job opportunities in health care for students while they are going through education (e.g. internships, employ nursing students as CNAs). (3)
- ◆ Market the CNA as a way to start a career in the health field. (3)
- ◆ Employers provide incentives for working staff to be preceptors or involved in other aspects of training students. (2)
- ◆ Improve technology at state licensing bodies to gather and disseminate data. (2)
- ◆ Develop programs to improve support for existing staff to help with retention (e.g. training to increase skills, addressing stress management/burn-out, extending mentorships for new nurses). (1)
- ◆ Create a sustained program to promote excellence and reward with meaningful professional development opportunities. (1) (S<)
- ◆ Develop an assessment process for new graduates to get feedback once on the job. (1)
- ◆ Promote health occupations by clarifying career building blocks and articulation agreements from through four-year degrees. (1) (S<)
- ◆ Compensate/reimburse staff for continuing education. (1)
- ◆ Investigate practices in other careers/occupations that lead to high retention.

- ◆ Provide better information to the public, especially youth, about the real vs. perceived risks of working with ill people to assist in recruitment.
- ◆ Expand and promote opportunities to study for health care occupations early in one's education and receive credit for it (e.g. advanced placement courses in high school).
- ◆ Improve retraining available to nurses who have left the profession to encourage them to return.
- ◆ Improve promotion of the technical colleges as a viable higher education option for health care occupations.
- ◆ Create ways for health care professionals to go into the high schools to teach in classes or activities as a way to promote their professions and educate young adults about them.
- ◆ Get information into the elementary schools to educate students on career opportunities and on the nature of disabilities.
- ◆ Connect health care professionals with existing programs in high schools such as Jobs for Maine's Graduates and Maine Career Advantage.
- ◆ Provide better orientation programs at worksites for CNAs, med. techs., others.]

Long-Term

- ◆ **Survey existing health care practitioners and those who have left the field to learn why they have stayed or left. (8)**
- ◆ **Provide financial support for those making career transitions to health care occupations (including scholarships, stipends, child care, etc.). (6)**
- ◆ **Expand capacity in nursing and other occupations in higher education institutions in Maine (N.B. some four year programs in private institutions have two-year components that could be expanded). (5)**
- ◆ **Improve competitiveness of faculty salaries and improve recruitment of qualified educators (especially in nursing). (5)**
- ◆ **Improve Medicare/Medicaid/private reimbursement for CNAs and other costs. (5)**
- ◆ **Create "magnet" hospitals as a way to improve retention through valuing the workforce. (4)**
- ◆ **Provide interest-free financing of education in health care occupations, with loans to be forgiven in specific occupations if people work in Maine (Blaine House Scholars program for educators is a model). (3)**
- ◆ **Make available in Maine programs of continuing education for radiological technicians in subspecialties such as MRI, CT, nuclear medicine, ultrasound. (2)**
- ◆ **Obtain state support to improve workplace ergonomics issues, taking into account the needs of an aging workforce and including sleep deprivation and stress issues, to improve efficiency. (2)**
- ◆ **Create an ongoing mass media campaign to promote the health care field using practitioners as spokespeople and targeting both school age students and mid-career candidates. (1) (S<)**
- ◆ **Create a sustained program to promote excellence and reward with meaningful professional development opportunities. (1) (S<).**

- ◆ Promote the autonomy available in jobs in health care professions to attract people to them.
- ◆ Institutions should empower nurses (e.g. convey trust, allow decision-making, provide with control over work environment and schedule).
- ◆ Improve career advancement opportunities across occupational categories (rather than a traditional career ladder in a single occupational area).
- ◆ Provide flexible scheduling of coursework for people combining career transition with education.
- ◆ Identify what traits and attributes lead to individual success in the health field to use in recruitment and retention.
- ◆ Promote health occupations by clarifying career building blocks and articulation agreements from through four-year degrees. (S<)
- ◆ Share faculty to accommodate the changing needs of specialties (e.g. have faculty from one program teach their subject in another program when demand necessitates).
- ◆ Study how to reduce the tasks that do not contribute to direct patient care.

Appendix C

ATTENDEES MARCH 26 LEADERSHIP MEETING

Name	Title	Organization
Kathy Boogaart	Director, Patient Care Services	Waldo County Gen. Hospital
Peter Booth	President	Goodall Hospital
Lorraine Bouchard	Director, Human Resources	Southern Maine Medical Center
James Cassidy	CEO	St. Mary's Regional Medical Center
William Cohen		MTCS Board of Trustees
Laurel Coleman, MD,		
Dana Connors	President	Maine State Chamber of Commerce
Ted DiPadova	VP for Academic Affairs	University of New England
John Fitzsimmons	President	Maine Technical College System
Anthony Forgione	President / CEO	Seventy Five State Street
William Gillis	Owner	Clover Health Care
Norman Ledwin	President	Eastern Maine Healthcare
Susan Longley	Senator	120 th Maine Legislature
Lisa McIlwain	VP of Human Resources	Miles Health Care
Terrence MacTaggart	Chancellor	University of Maine System
Jean Mattimore	Executive Director	MTCS Center for Career Development
Michael Michaud	Senate President	120 th Maine Legislature, First Regular Session
Sawin Millett		Office of US Senator Collins
Sandy Pomelow	Director of Human Resources	North Country Associates
Kandyce Powell	Executive Director	Maine Hospice Council
James Schillinger	Chief of Human Resources	Togus VA Medical Center
Diane Swandal	VP, Patient Care Services	St. Joseph's Healthcare
Carol Weston	Representative	120 th Maine Legislature
Beth Clark	Faculty	University of Maine Augusta
Ken Bowden	CEO	First Atlantic Corporation
Tim Churchill	CEO	Stephens Memorial Hospital
Pat Philbrook,RNC, NP	Executive Director	Maine State Nursing Association
Laird Covey	COO	Central Maine Medical Center
Steven Michaud	President	Maine Hospital Association
Peter Meulendyk	Vice President	Maine General Health Care
Scott Bullock	CEO	Maine General Medical Center
Michael Tyler	President / CEO	Sandy River Health System



RESOLVES OF MAINE

Second Regular Session of the 120th

CHAPTER 89 S.P. 711 - L.D. 1913

Resolve, to Implement the Recommendations of the Health Care Workforce Steering Committee

Sec. 1. Health Care Workforce Leadership Council. Resolved: That the Health Care Workforce Leadership Council, referred to in this resolve as the "council," is established to provide input on all policy initiatives, laws and rules concerning the skilled health care workforce to the Commissioner of Human Services, the Commissioner of Labor and the Department of Human Services, Bureau of Medical Services.

For the purposes of this resolve, "skilled health care workforce" consists of those health care workers who require a postsecondary education to work in the health care industry, including nurses, radiologic technologists and technicians, health information technicians, surgical technologists, pharmacists, pharmacy technicians, medical transcriptionists, respiratory therapists, medical and clinical laboratory technologists and laboratory technicians, social workers and other skilled workers other than physicians.

1. Goal. The goal of the council is to ensure an adequate supply of skilled health care workers to the State's health care industry, including hospitals, nursing facilities, physicians' offices, laboratories, outpatient service providers and home care service providers. Issues to be considered regarding the skilled health care workforce include providing adequate capacity in educational programs to meet the demand for skilled health care workers, attracting students to health care fields of study, recruiting new employees to health care positions, retaining employees in health care positions and retaining trained health care workers in their professions.

2. Membership; appointment. The council consists of 13 members appointed as follows.

A. The Governor shall appoint 5 members as follows.

- (1) Three must represent postsecondary educational institutions that offer training for skilled health care workers, of which one must represent a private postsecondary educational institution and 2 must represent public postsecondary educational institutions.
- (2) One must represent a labor organization that represents skilled health care workers.
- (3) One must represent a professional organization that represents skilled health care workers working in the administration of care for patients.

B. The President of the Senate shall appoint 4 members as follows.

- (1) Two must represent employers of skilled health care workers.
- (2) One must represent a labor organization that represents skilled health care workers.
- (3) One must represent a professional organization that represents skilled health care

workers working in direct care for patients.

C. The Speaker of the House of Representatives shall appoint 4 members as follows.

- (1) One must represent a labor organization that represents skilled health care workers.
- (2) One must represent a professional organization that represents skilled health care workers working in direct care for patients.
- (3) Two must represent employers of skilled health care workers.

3. Meetings. By September 1, 2002, the Executive Director of the Legislative Council or the designee of the executive director shall convene the first meeting of the council, at which the members shall elect a chair from among the members of the council. The council shall meet as often as necessary and appropriate to achieve the goals of the council. Members of the council serve as volunteers and are not entitled to reimbursement for expenses or to per diem payment.

4. Staff. The Maine Technical College System shall provide staff support to the council.

5. Report. By February 1, 2003, the council shall provide an interim report to the joint standing committee of the Legislature having jurisdiction over health and human services matters regarding the work of the council and any initiatives, laws or rules pertaining to the skilled health care workforce regarding which the council provided input to the Commissioner of Human Services, the Commissioner of Labor or the Department of Human Services, Bureau of Medical Services. By November 3, 2004 the council shall provide a final report on the same issues and in the same manner as the interim report.

Effective July 25, 2002, unless otherwise indicated.

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Office of the Revisor of Statutes
State House, Room 108
Augusta, Maine 04333

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RESOLVES

First Regular Session of the 121st

CHAPTER 11 H.P. 160 - L.D. 201

Resolve, To Amend the Laws Governing the Health Care Workforce Leadership council

Sec. 1. Resolve 2001, c. 89, §1, sub-§5, amended. Resolved: That Resolve 2001, c. 89, §1, sub-§5 is amended to read:

5. Report. By ~~February~~ November 1, 2003, the council shall provide an interim report to the joint standing committee of the Legislature having jurisdiction over health and human services matters regarding the work of the council, the potential role and need for a permanent health care workforce council or center and any initiatives, laws or rules pertaining to the skilled health care workforce regarding which the council provided input to the Commissioner of Human Services, the Commissioner of Labor or the Department of Human Services, Bureau of Medical Services. By November 3, 2004 the council shall provide a final report on the same issues and in the same manner as the interim report.

Effective September 13, 2003, unless otherwise indicated.

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About the 121st Laws Of Maine

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Augusta, Maine 04333

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Health Care Workforce Leadership Council

Interim Report

Prepared for the

Joint Standing Committee on Health and Human Services

121st Maine Legislature

October 30, 2003

Health Care Workforce Leadership Council

Background:

The Health Care Workforce Leadership Council was established in a resolve by the Second Regular Session of the 120th Maine Legislature to “provide input on all policy initiatives, laws, and rules concerning the skilled health care workforce to the Commissioner of Human Services, the Commissioner of Labor and the Department of Human Services, Bureau of Medical Service.” The goal of the Council is “to ensure an adequate supply of skilled health care workers to the State’s health care industry.” The council is required to provide an interim report to the Joint Standing Committee on Health and Human Services, which, under a resolve of the First Regular Session of the 121st Maine Legislature amending the enabling legislation, should be completed by November 1, 2003 and include comment on the work of the council and the “potential role and need for a permanent health care workforce council or center.” The final report of the Council is to be provided to the Joint Standing Committee on Health and Human Services by November 3, 2004. (A copy of the enabling legislation as amended is included as Attachment A).

Council’s Activities to Date:

The council was created in March 2002, and appointments to the council were made during 2002 and 2003 by the Governor, President of the Senate and Speaker of the House of Representatives. The first meeting of the Council was convened on September 17, 2003, by the Executive Director of the Maine State Legislature as specified in the legislation. (A list of Council members is included as Attachment B.) Council members have met four times in the two months since the initial meeting to begin the process of defining a workplan for its outcomes and operation. The highlights of each meeting are listed below and the minutes of the meetings are attached.

- ***September 17, 2003***

- Introduction of council members revealed that all had agreed to serve on the council because of the high priority of this issue to their organizations and the health care system in Maine.

- Review of enabling legislation and charge of the council

- Review of timeline defined for council and reporting requirements, which were recognized as challenging.

- Election of Chair: Margaret (Peggy) Pinkham was elected interim chair so that the election of a permanent chair could be deferred until the second meeting when more council members could be present to vote.

-Preliminary discussion of issues of workplan and council organization. Considerable discussion focused on the need for and availability of data related to the council's work.

-Decision to write to the Commissioners of the Departments of Human Services and Labor to invite them or their representatives to attend the next meeting to discuss how the council might work with them to fulfill the charge of the enabling legislation.

- ***September 30, 2003***

-Representatives of the Maine Department of Labor appeared to review with the council those programs and operations of the Department that could connect with the work of the council. While there does not appear to be an existing communication framework for the input envisioned in the legislation, the Director of the Maine Jobs Council indicated an interest in attending council meetings and building a connection between the work of the Jobs Council and this council, especially as it is considering its approach to the health care industry. He was invited to attend all future meetings.

-Another issue the Department had been asked to address was the availability of MDOL data that might be useful to the council. Once the council's workplan has been solidified, representatives of MDOL have agreed to work with the council to discuss this further.

-Council members agreed to use the issue areas identified for consideration by the council as the priority areas for its review. They are:

- *Providing adequate capacity in educational programs to meet the demand for skilled health care workers
- *Attracting students to health care fields of study
- *Recruiting new employees to health care positions
- *Retaining employees in health care positions and retaining trained health care workers in their professions

-The council also decided to begin its examination of these areas by reviewing Maine's Health Care Skilled Worker Shortage: A Call to Action, the 2001 report of the Committee to Address the Health Care Skilled Worker Shortage which led to the creation of the council. This review will serve as the foundation for the council's workplan leading to its final report in November 2004.

- ***October 14, 2003***

-The Director of the Office of Rural Health and Primary Care spoke as the liaison for the Department of Human Services to the council. Again, there does not seem to be an existing communication vehicle that the council can use to provide input to the Department so the council will need to explore options further. This Office generally monitors shortages of physicians and dentists, and physicians are not within the scope of the council.

-In fact, when asked, the Director suggested there is a need for data to identify locations of shortages of skilled workers by occupation.

-Members reviewed the outline for the interim report to the Legislature and continued their discussion of the 2001 report.

- ***October 28, 2003***

-Members provided comments on the final draft of the interim report.

-Members reviewed in detail the first two recommendations of the 2001 report, discussed the status of the action items and barriers to their accomplishment. They also determined which items might be included in the work of the council.

Council's Progress to Date:

- In their discussions so far, council members have reinforced the importance of health care to Maine's economy today and for the future. They have also articulated the critical role a skilled workforce plays in the economy, in health care delivery, and in the public policy issues related to both.
- Given the short time between the initial convening and the completion of this report, the council has met often and defined a preliminary direction for their work.
- Members recognize that the council will be in existence for a little more than one year, so must use its time effectively to provide results and recommendations envisioned in the enabling legislation.
- Data—its availability, accuracy, and appropriateness in assessing the issue of workforce shortages—has emerged as a recurring theme in council discussions and will continue to be a central discussion item.
- As the council considers the potential for an ongoing council or center, it has already begun to inquire about other organizations that have projects or programs focusing on workforce development that might already be concentrating on health care or could do so. Council members see the need to monitor this issue for the long-term because of its impact on health care in the State. They support exploring that role for an existing organization before considering any recommendation that a new organization be created for that purpose.

October 30, 2003

The Honorable Michael F. Brennan, Senate Chair
The Honorable Thomas J. Kane, House Chair
Joint Standing Committee on Health and Human Services
100 State House Station
Augusta, ME 04330-0100

Dear Senator Brennan, Representative Kane, and Committee Members,

Consistent with the requirements of its enabling legislation, I am submitting the interim report of the Health Care Workforce Leadership Council. In their meetings to date, Council members have affirmed the critical importance of addressing the State's need for skilled workers in the health care system.

When you have reviewed the report, the council or I would be happy to answer any questions you might have. The council's final report is scheduled to be submitted to your Committee by November 3, 2004.

Sincerely yours,

Margaret G. Pinkham
Council Chair and
President/CEO
St. Andrews Hospital & Healthcare

Act to Ensure an Adequate Supply of a Skilled Health Care Workforce

Be it enacted by the People of the State of Maine as follows:

Section 1. 22 MRSA § 256, as enacted by PL 1989, c. 579, is amended to read:

§256. Health care occupations ~~manual report~~

The Department of Labor, ~~in conjunction with the Office of Health Data and Program Management's Office of Data, Research, and Vital Statistics,~~ shall compile and annually update a health care occupations ~~manual report~~ to be completed ~~and presented to the Health Workforce Forum by September 15, 2006-1, 1994.~~ The ~~manual report~~ shall ~~be posted on the Department of Labor web site and~~ provide the following information:

1. Listing. A listing of all health care occupations: licensed, registered or certified under the authority of the boards listed in this section;
2. Description. A brief description of each occupation;
3. Education. Minimum education requirements;
4. Education opportunities. Maine sSchools throughout New England offering education in those various health care occupations, including current enrollment and annual number of graduates;
5. Salary information. Average starting salary for each occupation;
6. Future outlook needs. Projected needs for the next 5 years; An analysis of trends and the current outlook in employment supply and demand, including implications for the state and health care industry; and
7. Financial aid. Financial aid available for education:; and
8. Professional Data.

A. The boards listed below shall amend their rules so that all licensed, registered or certified persons, including all dependent practitioners, under the authority of that board shall receive a voluntary survey with their licensure, registration or certification renewal beginning January 1, 2006:

- (1) Maine Emergency Medical Services;
- (2) Radiologic Technology Board of Examiners;
- (3) Board of Occupation Therapy Practice;
- (4) Examiners on Speech-Language Pathology and Audiology;
- (5) Maine Board of Pharmacy;
- (6) State Board of Nursing;
- (7) Maine Board of Medicine;
- (8) Board of Osteopathic Licensure;
- (9) Board of Examiners in Physical Therapy;
- (10) Board of Respiratory Care Practitioners;
- (11) Board of Licensing of Dietetic Practice;
- (12) State Board of Social Worker Licensure;
- (13) State Board of Dental Examiners;
- (14) State Board of Alcohol and Drug Counselors;
- (15) State Board of Examiners of Psychologists; and
- (16) State Board of Dental Examiners.

B. All surveys must include, at a minimum, the following information:

- (1) Home zip code;

- (2) Business zip code;
(3) Birth year;
(4) Gender;
(5) Race;
(6) Current employment status (employed in health care field, employed in another field, seeking health care employment, temporarily not working and not seeking work, retired or no plan to return to work, or other please specify);
(7) Practice setting (hospital, private practice, community clinic, nursing home, academic, government, other institution, or other please specify);
(8) Field of licensure/registration/certification;
(9) Specialty credential, if any;
~~(7)~~ (10) Whether the person plans to be working in health care five years from now;
~~(8)~~ (11) Basic and advanced education (degree earned and state);
~~(9)~~ (12) Hours per week working primary position (hours hired per week, average hours worked per week, preferred number of hours per week, and number of hours providing direct care per week);
~~(10)~~ (13) In addition to the person's primary position, number of hours worked per week for other health care employers;
~~(11)~~ (14) If not currently working in health care, is it because of wages/benefits, retired, unable to find position desired, pursuing education opportunities, pursuing other career opportunity, or other please specify.

C. All surveys will be submitted to the Office of Health Data and Program Management's Office of Data, Research and Vital Statistics for analysis, and blinded survey data shall be publicly available.

Rulemaking. Rules adopted to implement this section are routine technical rules as defined in the Maine Revised Statutes, Title 5, chapter 375, subchapter II-A.

Section 3. 22 MRSA § 257, as enacted by PL 1995, c. 653, is amended to read:

§257. Health workforce forum

The ~~Department of Health and Human Services~~ shall convene at least ~~one~~ annually a health workforce forum to review the report developed under section 256 and discuss health care workforce issues. ~~The forum must include representatives of health professionals, licensing boards and health education programs. The forum shall:~~

1. Inventory. ~~Develop an inventory of present health care workforce and educational programs; and~~

2. Research. ~~Develop research and analytical methods for understanding population-based health care workforce needs on an ongoing basis.~~

~~Through the forum, the department shall serve as a clearinghouse for information relating to health workforce issues. The department shall use the information gathered through the forum to develop its health policy and planning decisions authorized under this Title and to make appropriate policy recommendations based on its analysis of the health care workforce.~~

1. Membership. The forum consists of 15 members as follows:

A. The Governor shall appoint 6 members as follows:

- (1) Three must represent postsecondary educational institutions that offer training for skilled health care workers, of which one must represent a private postsecondary educational institution and 2 must represent public postsecondary educational institutions.
- (2) One must represent a licensing board identified in 22 MRSA § 256 (8) as revised in this document.
- (3) One must represent a professional organization that represents skilled health care workers working in the administration of care for patients.
- (4) One must be a member of the Health Care Workforce Leadership Group, the predecessor group of the Forum. This member will serve for one year only.
- (5) One must be from the Department of Labor and be knowledgeable about the Department's workforce data and analysis capabilities.

B. The President of the Senate shall appoint 4 members as follows.

- (1) Two must represent employers of skilled health care workers.
- (2) One must represent a labor organization that represents skilled health care workers.
- (3) One must represent a professional organization that represents skilled health care workers working in direct care for patients.

C. The Speaker of the House of Representatives shall appoint 4 members as follows.

- (1) One must represent a labor organization that represents skilled health care workers.
- (2) One must represent a professional organization that represents skilled health care workers working in direct care for patients.
- (3) Two must represent employers of skilled health care workers.

2. Meetings. The department shall convene the first meeting of the Forum, at which the members shall elect a chair from among the members of the Forum. The Forum shall meet as often as necessary and appropriate to achieve the goals of the Forum. Members of the Forum serve as volunteers and are not entitled to reimbursement for expenses or to per diem payment.

3. Report. The department shall post the Forum's annual report and recommendations on its website by December 31st of each year, beginning with December 2006.

4. Staff. The department shall provide staff support to the Forum.

Occupations* Included in the Recommendations of this Report

- Dentists and Dental Hygienists* **
- Emergency Medical Technicians and Paramedics*
- Mental Health and Substance Abuse Social Workers*
- Nurses—Registered, Licensed Practical and Licensed Vocational*
- Occupational Therapists, Aides and Assistants*
- Pharmacists and Pharmacy Technicians*
- Physical Therapists and Physical Therapy Assistants*
- Physicians and Physician Assistants* **
- Psychologists
- Radiation Therapists*
- Radiologic Technologists and Technicians*
- Respiratory Therapists and Respiratory Therapy Technicians*
- Speech-Language Pathologists* and Audiologists

*These occupational titles correspond directly to the MDOL list of titles.

**Requests will be made of the Licensing Boards with jurisdiction over allopathic and osteopathic physicians, dentists and dental hygienists that they include specific questions in their existing surveys so that their data can be included in the analysis conducted by the Department of Labor.